UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K/A

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2019
or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission File Number 001-37443

Univar Solutions Inc.
(Exact name of registrant as specified in its charter)

Delaware	**26-1251958**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

3075 Highland Parkway, Suite 200	**Downers Grove,**	**Illinois**	**60515**
(Address of principal executive offices)			**(Zip Code)**

Registrant's telephone number, including area code: (331) 777-6000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock ($0.01 par value)	**UNVR**	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act:
Warrants to acquire 0.1525 shares of common stock, $0.01 par value per share, of Univar Solutions Inc. and $1.51 in cash

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐	Non-accelerated filer	☐	Smaller reporting company	☐	Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

Aggregate market value of common stock held by non-affiliates of registrant on June 28, 2019: $3.4 billion, based on a closing price of registrant's Common Stock of $22.04 per share.

At February 12, 2020, 168,848,248 shares of the registrant's common stock, $0.01 par value, were outstanding.

Explanatory Note

Univar Solutions Inc. (the “Company”) is filing this Amendment No. 1 on Form 10-K/A (this “Amendment”) to its Annual Report on Form 10-K for the year ended December 31, 2019, originally filed with the Securities and Exchange Commission (the “SEC”) on February 25, 2020 (the “Form 10-K”), for the sole purpose of including language from the introductory portion of paragraph 4 of the Section 302 certifications regarding the Company’s internal control over financial reporting, as reflected in the updated certifications included as Exhibits 31.1 and 31.2 with this Amendment.

Other than as expressly set forth above, no changes have been made in this Amendment to amend, modify or restate any other information or disclosures presented in the Form 10-K. This Amendment does not reflect events occurring after the original filing of the Form 10-K. As a result, the Company’s Annual Report on Form 10-K for the year ended December 31, 2019 continues to speak as of February 25, 2020. The Amendment should be read in conjunction with the Company's Form 10-K and other Company filings made with the SEC.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Univar Solutions Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Univar Solutions Inc. as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2019 and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework and our report dated February 25, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

	Environmental Liabilities
Description of the Matter	At December 31, 2019, the Company's environmental liability balance was $78.7 million. As discussed in Note 21 of the financial statements, the Company is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively "environmental remediation work") at approximately 130 locations. In determining the appropriate level of environmental reserves, the Company considers several factors such as information obtained from investigatory studies; required scope and estimated costs of remediation; the interpretation, application and enforcement of laws and regulations; the development of alternative cleanup technologies and methods; and the level of the Company's responsibility for remediating at various sites. Auditing management's accrual for environmental liabilities was especially challenging because it involves judgmental underlying assumptions, including remediation methods, remediation time horizon and remediation cost estimates. These assumptions have a significant effect on the accrual for environmental liabilities.

How we addressed the Matter in Our Audit	We tested management's controls that address the risks of material misstatement relating to the measurement and valuation of the environmental liabilities. For example, we tested controls over management's review of the environmental liability calculations and, the significant assumptions and the data inputs provided to management's specialists. To test the accrual for environmental liabilities, we involved our specialist to assist us in evaluating the reasonableness of the Company's calculation and underlying assumptions. We performed audit procedures that included, among others, assessing key methodologies and testing the significant assumptions and the underlying data used by the management's specialists. For example, we tested the site's current remediation status and remediation strategy, which included an analysis of the site's remediation timeline, regulatory requirements, remediation actions and related technologies and eligibility for discounting. In addition, we performed a search of various data sources for any unidentified environmental liabilities for which the Company may be a potential responsible party.
	Accounting for Nexeo Solutions Acquisition
Description of the Matter	During 2019, the Company completed its acquisition of Nexeo Solutions, Inc (Nexeo) for net consideration of $1,814.8 million, as discussed in Note 3 to the consolidated financial statements. The Company accounted for the acquisition under the acquisition method of accounting for business combinations. Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based on their respective fair values. Assets acquired included intangible assets representing customer relationships of approximately $138.7 million. Auditing the Company's accounting for its acquisition of Nexeo was complex due to the highly judgmental nature of the significant assumptions used to estimate the fair value of the intangible assets including the discount rates and certain assumptions that form the basis of the forecasted results such as sales growth rates, percentage of revenue attributable to customer relationships, customer attrition rates, and EBITDA margin. These significant assumptions are forward looking and could be affected by future economic and market conditions.
How we addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process for determining the fair value of the acquired intangible assets, including controls over management's review of the significant assumptions described above. To test the estimated fair value of the acquired intangible assets, we performed audit procedures that included, among others, evaluating the Company's use of the income approach which utilized the excess earnings method and testing the significant assumptions used in the model, including the completeness and accuracy of the underlying data. For example, we compared the significant assumptions to current industry, market and economic trends, to the assumptions used to value similar assets in other acquisitions, to the historical results of the acquired business and to other guidelines used by companies within the same industry. We compared the prospective financial information for consistency with other prospective financial information prepared by the Company. We involved our specialists to assist in our evaluation of the significant assumptions described above.

/s/ Ernst & Young LLP
We have served as the Company's auditor since 2010.
Chicago, Illinois
February 25, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Univar Solutions Inc.

Opinion on Internal Control over Financial Reporting

We have audited Univar Solutions Inc.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Univar Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Nexeo Solutions, Inc., which is included in the 2019 consolidated financial statements of the Company and constituted 32.5% total assets, as of December 31, 2019 and 16% of revenues, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Nexeo Solutions Inc.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2019 consolidated financial statements of Univar Solutions Inc. and our report dated February 25, 2020, expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and applicable rules and regulation of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitation of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP
Chicago, Illinois
February 25, 2020

UNIVAR SOLUTIONS INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per share data)	Note	Year ended December 31, 2019	2018	2017
Net sales		$ 9,286.9	$ 8,632.5	$ 8,253.7
Cost of goods sold (exclusive of depreciation)		7,146.1	6,732.4	6,448.2
Operating expenses:				
Outbound freight and handling		364.8	328.3	292.0
Warehousing, selling and administrative		1,068.8	931.4	919.7
Other operating expenses, net	**6**	298.2	73.5	55.4
Depreciation		155.0	125.2	135.0
Amortization		59.7	54.3	65.4
Impairment charges	**16**	7.0	—	—
Total operating expenses		$ 1,953.5	$ 1,512.7	$ 1,467.5
Operating income		$ 187.3	$ 387.4	$ 338.0
Other (expense) income:				
Interest income		7.7	3.2	4.0
Interest expense		(147.2)	(135.6)	(152.0)
Gain on sale of business	**4**	41.4	—	—
Loss on extinguishment of debt	**18**	(19.8)	(0.1)	(3.8)
Other expense, net	**8**	(70.5)	(32.7)	(17.4)
Total other expense		$ (188.4)	$ (165.2)	$ (169.2)
(Loss) income before income taxes		(1.1)	222.2	168.8
Income tax expense from continuing operations	**9**	104.5	49.9	49.0
Net (loss) income from continuing operations		$ (105.6)	$ 172.3	$ 119.8
Net income from discontinued operations	**4**	$ 5.4	$ —	$ —
Net (loss) income		$ (100.2)	$ 172.3	$ 119.8
(Loss) income per common share:				
Basic from continuing operations	**10**	$ (0.64)	$ 1.22	$ 0.85
Basic from discontinued operations	**10**	0.03	—	—
Basic (loss) income per common share		$ (0.61)	$ 1.22	$ 0.85
Diluted from continuing operations	**10**	$ (0.64)	$ 1.21	$ 0.85
Diluted from discontinued operations	**10**	0.03	—	—
Diluted (loss) income per common share		$ (0.61)	$ 1.21	$ 0.85
Weighted average common shares outstanding:				
Basic	**10**	164.1	141.2	140.2
Diluted	**10**	164.1	142.2	141.4

The accompanying notes are an integral part of these consolidated financial statements.

UNIVAR SOLUTIONS INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

(in millions)	Note	Year ended December 31, 2019	2018	2017
Net (loss) income		$ (100.2)	$ 172.3	$ 119.8
Other comprehensive (loss) income, net of tax:				
Impact due to adoption of ASU 2018-02	**2**	(3.2)	—	—
Impact due to adoption of ASU 2017-12 (1)		—	0.5	—
Foreign currency translation	**13**	22.8	(97.0)	107.1
Pension and other postretirement benefits adjustment	**13**	0.1	0.1	(2.4)
Derivative financial instruments	**13**	(25.8)	1.7	6.7
Total other comprehensive (loss) income, net of tax		$ (6.1)	$ (94.7)	$ 111.4
Comprehensive (loss) income		$ (106.3)	$ 77.6	$ 231.2

(1) Impact due to the adoption of Accounting Standards Update (“ASU”) 2017-12 “Targeted Improvements to Accounting for Hedging Activities” on January 1, 2018.

The accompanying notes are an integral part of these consolidated financial statements.

UNIVAR SOLUTIONS INC.
CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)	Note	December 31, 2019	December 31, 2018
Assets			
Current assets:			
Cash and cash equivalents		$ 330.3	$ 121.6
Trade accounts receivable, net		1,160.1	1,094.7
Inventories		796.0	803.3
Prepaid expenses and other current assets		167.2	169.1
Total current assets		$ 2,453.6	$ 2,188.7
Property, plant and equipment, net	**14**	1,152.4	955.8
Goodwill	**15**	2,280.8	1,780.7
Intangible assets, net	**15**	320.2	238.1
Deferred tax assets	**9**	21.3	24.8
Other assets (1)		266.5	84.3
Total assets		$ 6,494.8	$ 5,272.4
Liabilities and stockholders' equity			
Current liabilities:			
Short-term financing	**18**	$ 0.7	$ 8.1
Trade accounts payable		895.0	925.4
Current portion of long-term debt	**18**	25.0	21.7
Accrued compensation		103.6	93.6
Other accrued expenses (1)	**17**	425.1	285.8
Total current liabilities		$ 1,449.4	$ 1,334.6
Long-term debt	**18**	2,688.8	2,350.4
Pension and other postretirement benefit liabilities	**11**	295.6	254.4
Deferred tax liabilities	**9**	56.3	42.9
Other long-term liabilities (1)		271.9	98.4
Total liabilities		$ 4,762.0	$ 4,080.7
Stockholders' equity:			
Preferred stock, 200.0 million shares authorized at $0.01 par value with no shares issued or outstanding as of December 31, 2019 and 2018, respectively		$ —	$ —
Common stock, 2.0 billion shares authorized at $0.01 par value with 168.7 million and 141.7 million shares issued and outstanding at December 31, 2019 and 2018, respectively		1.7	1.4
Additional paid-in capital		2,968.9	2,325.0
Accumulated deficit		(858.5)	(761.5)
Accumulated other comprehensive loss	**13**	(379.3)	(373.2)
Total stockholders' equity		$ 1,732.8	$ 1,191.7
Total liabilities and stockholders' equity		$ 6,494.8	$ 5,272.4

(1) Operating lease assets and operating lease liabilities are included in other assets, other accrued expenses and other long-term liabilities in 2019. Refer to "Note 22: Leasing" for more information.

The accompanying notes are an integral part of these consolidated financial statements.

UNIVAR SOLUTIONS INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year ended December 31,		
(in millions)	Note	2019	2018	2017
Operating activities:				
Net (loss) income		$ (100.2)	$ 172.3	$ 119.8
Adjustments to reconcile net (loss) income to net cash provided by operating activities:				
Depreciation and amortization		214.7	179.5	200.4
Impairment charges	**16**	7.0	—	—
Amortization of deferred financing fees and debt discount		8.9	7.6	7.9
Amortization of pension cost (credits) from accumulated other comprehensive loss	**11**	0.1	2.7	(0.2)
Gain on sale of business	**4**	(41.4)	—	—
Loss on extinguishment of debt	**18**	13.1	0.1	3.8
(Gain) loss on sale of property, plant and equipment and other assets		(9.9)	2.0	(11.3)
Deferred income taxes	**9**	24.3	2.8	11.7
Stock-based compensation expense	**12**	25.1	20.7	19.7
Charge for inventory step-up of acquired inventory		5.3	—	—
Other		3.0	0.7	(0.7)
Changes in operating assets and liabilities:				
Trade accounts receivable, net		197.0	(62.1)	(58.5)
Inventories		69.0	14.4	(47.7)
Prepaid expenses and other current assets		54.3	(19.3)	(8.7)
Trade accounts payable		(70.9)	9.3	53.6
Pensions and other postretirement benefit liabilities		21.9	(15.4)	(51.8)
Other, net		(57.4)	(25.4)	44.6
Net cash provided by operating activities		$ 363.9	$ 289.9	$ 282.6
Investing activities:				
Purchases of property, plant and equipment		$ (122.5)	$ (94.6)	$ (82.7)
Proceeds from sale of property, plant and equipment and other assets		54.8	14.5	29.2
Purchases of businesses, net of cash acquired	**3**	(1,201.0)	(18.6)	(24.4)
Proceeds from sale of business	**4**	838.3	—	—
Other		(2.7)	(0.3)	(1.2)
Net cash used by investing activities		$ (433.1)	$ (99.0)	$ (79.1)
Financing activities:				
Proceeds from the issuance of long-term debt	**18**	$ 1,845.8	$ —	$ 4,477.8
Payments on long-term debt and finance lease obligations	**18**	(1,545.9)	(561.9)	(4,588.7)
Net proceeds under revolving credit facilities	**18**	7.2	41.7	3.0
Short-term financing, net	**18**	(9.2)	0.5	(22.2)
Financing fees paid	**18**	(7.9)	(1.1)	(7.7)
Taxes paid related to net share settlements of stock-based compensation awards		(2.8)	(4.1)	(8.5)
Stock option exercises	**12**	6.6	5.9	36.5
Contingent consideration payments		—	(0.4)	(3.7)
Other		1.4	1.1	1.1
Net cash provided (used) by financing activities		$ 295.2	$ (518.3)	$ (112.4)
Effect of exchange rate changes on cash and cash equivalents		$ (17.3)	$ (18.0)	$ 39.5
Net increase (decrease) in cash and cash equivalents		208.7	(345.4)	130.6
Cash and cash equivalents at beginning of period		121.6	467.0	336.4
Cash and cash equivalents at end of period		$ 330.3	$ 121.6	$ 467.0
Supplemental disclosure of cash flow information:				
Cash paid during the period for:				
Income taxes		$ 42.5	$ 65.0	$ 29.9
Interest, net of capitalized interest		146.1	128.2	140.2
Non-cash activities:				
Fair value of common stock issued for acquisition of business	**3**	$ 613.8	$ —	$ —
Additions of property, plant and equipment included in trade accounts payable and other accrued expenses		9.8	14.6	7.4
Additions of property, plant and equipment under a finance lease obligation		23.3	23.6	19.9
Additions of assets under an operating lease obligation		25.5	—	—

The accompanying notes are an integral part of these consolidated financial statements.

UNIVAR SOLUTIONS INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(in millions, except per share data)	Common stock (shares)	Common stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total
Balance, January 1, 2017	**138.8**	**$ 1.4**	**$ 2,251.8**	**$ (1,053.4)**	**$ (389.9)**	**$ 809.9**
Impact due to adoption of ASU, net of tax $0.2 (1)	—	—	0.7	(0.5)	—	0.2
Net income	—	—	—	119.8	—	119.8
Foreign currency translation adjustment, net of tax $(2.1)	—	—	—	—	107.1	107.1
Pension and other postretirement benefits adjustment, net of tax $0.6	—	—	—	—	(2.4)	(2.4)
Derivative financial instruments, net of tax $(4.3)	—	—	—	—	6.7	6.7
Restricted stock units vested	0.8	—	—	—	—	—
Tax withholdings related to net share settlements of stock-based compensation awards	(0.3)	—	(8.5)	—	—	(8.5)
Stock option exercises	1.8	—	36.5	—	—	36.5
Employee stock purchase plan	—	—	1.1	—	—	1.1
Stock-based compensation	—	—	19.7	—	—	19.7
Balance, December 31, 2017	**141.1**	**$ 1.4**	**$ 2,301.3**	**$ (934.1)**	**$ (278.5)**	**$ 1,090.1**
Impact due to adoption of ASU, net of tax $(0.3) (2)	—	—	—	0.3	0.5	0.8
Net income	—	—	—	172.3	—	172.3
Foreign currency translation adjustment, net of tax $2.4	—	—	—	—	(97.0)	(97.0)
Pension and other postretirement benefits adjustment, net of tax $(0.1)	—	—	—	—	0.1	0.1
Derivative financial instruments, net of tax $(0.4)	—	—	—	—	1.7	1.7
Restricted stock units vested	0.4	—	—	—	—	—
Tax withholdings related to net share settlements of stock-based compensation awards	(0.1)	—	(4.1)	—	—	(4.1)
Stock option exercises	0.3	—	5.9	—	—	5.9
Employee stock purchase plan	—	—	1.1	—	—	1.1
Stock-based compensation	—	—	20.7	—	—	20.7
Other	—	—	0.1	—	—	0.1
Balance, December 31, 2018	**141.7**	**$ 1.4**	**$ 2,325.0**	**$ (761.5)**	**$ (373.2)**	**$ 1,191.7**
Impact due to adoption of ASU (3)	—	—	—	3.2	(3.2)	—
Net loss	—	—	—	(100.2)	—	(100.2)
Foreign currency translation adjustment, net of tax $4.9	—	—	—	—	22.8	22.8
Pension and other postretirement benefits adjustment	—	—	—	—	0.1	0.1
Derivative financial instruments, net of tax $7.0	—	—	—	—	(25.8)	(25.8)
Common stock issued for the Nexeo acquisition (4)	27.9	0.3	649.0	—	—	649.3
Shares canceled	(1.5)		(35.5)	—	—	(35.5)
Restricted stock units vested	0.4	—	—	—	—	—
Tax withholdings related to net share settlements of stock-based compensation awards	(0.2)	—	(2.8)	—	—	(2.8)
Stock option exercises	0.3	—	6.6	—	—	6.6
Employee stock purchase plan	0.1	—	1.4	—	—	1.4
Stock-based compensation	—	—	25.1	—	—	25.1
Other	—	—	0.1	—	—	0.1
Balance, December 31, 2019	**168.7**	**$ 1.7**	**$ 2,968.9**	**$ (858.5)**	**$ (379.3)**	**$ 1,732.8**

(1) Adjusted due to the adoption of ASU 2016-09 "Improvement to Employee Share-Based Payment Accounting" on January 1, 2017.
(2) Adjusted due to the adoption of ASU 2014-09 "Revenue from Contracts with Customers" on January 1, 2018.
(3) Refer to "Note 2: Significant accounting policies" for more information.
(4) Refer to "Note 3: Business combinations" for more information.

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019 AND 2018 AND
FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017

1. Nature of operations

Headquartered in Downers Grove, Illinois, Univar Solutions Inc. (“Company” or “Univar Solutions”) is a leading global chemical and ingredients distributor and provider of specialty services. The Company’s operations are structured into four reportable segments that represent the geographic areas under which the Company manages its business:

- Univar Solutions USA (“USA”)
- Univar Solutions Canada (“Canada”)
- Univar Solutions Europe, the Middle East and Africa (“EMEA”)
- Univar Solutions Latin America (“LATAM”)

In 2019, the Company renamed its “Rest of World” segment “Latin America,” which includes certain developing businesses in Latin America (including Brazil and Mexico) and the Asia-Pacific region.

2. Significant accounting policies

Basis of consolidation and presentation

The consolidated financial statements include the financial statements of the Company and its majority-owned subsidiaries. Subsidiaries are consolidated if the Company has a controlling financial interest, which may exist based on ownership of a majority of the voting interest, or based on the Company’s determination that it is the primary beneficiary of a variable interest entity (“VIE”). The Company does not have any material interests in VIEs. All intercompany balances and transactions are eliminated in consolidation. Unless otherwise indicated, all financial data presented in these consolidated financial statements are expressed in US dollars.

On our consolidated statements of cash flows for 2018 and 2017, the amounts included in “net proceeds under revolving credit facilities,” which were previously included in “proceeds from the issuance of long-term debt,” are now presented separately to conform to the current year presentation.

Use of estimates

The preparation of consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions affecting the amounts reported and disclosed in the financial statements and accompanying notes. Actual results could differ materially from these estimates.

Recently issued and adopted accounting pronouncements

On January 1, 2019, the Company adopted ASU 2016-02 “Leases” (Topic 842), which supersedes the lease recognition requirements in ASC Topic 840, “Leases,” using the modified retrospective method by applying the new guidance to all leases existing at the date of initial application and not restating comparative periods. The Company has elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed the historical lease classification to carry forward. The Company recognized the cumulative effect of initially applying the new lease standard as an adjustment to the 2019 opening balance sheet and also includes adjustments related to previously unrecognized finance leases as follows:

(in millions)	Balance at December 31, 2018	Adjustments due to ASU 2016-02	Balance at January 1, 2019
Assets			
Property, plant and equipment, net	$ 955.8	$ 5.4	$ 961.2
Other assets	84.3	166.8	251.1
Liabilities			
Current portion of long-term debt	$ 21.7	$ (4.5)	$ 17.2
Other accrued expenses	285.8	43.8	329.6
Long-term debt	2,350.4	9.9	2,360.3
Other long-term liabilities	98.4	123.0	221.4

On January 1, 2019, the Company adopted ASU 2018-02 "Income Statement - Reporting Comprehensive Income" (Topic 220) "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" ("AOCI") which enabled the Company to reclassify from AOCI to retained earnings, certain stranded tax effects, resulting from the Tax Cuts and Jobs Act. Upon adoption, we reclassified $3.2 million of the stranded tax effects from AOCI to accumulated deficit.

Accounting pronouncements issued but not yet adopted

In June 2016, the FASB issued ASU 2016-13 "Financial Instruments - Credit Losses" (Topic 326) which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. The Company will adopt this guidance effective January 1, 2020 and is finalizing the impacts which are not expected to be material.

In August 2018, the FASB issued ASU 2018-13 "Fair Value Measurement" (Topic 820) which modifies the requirements related to fair value disclosures. The Company will adopt this guidance effective January 1, 2020 and is finalizing the impacts that will be reflected in the financial statement disclosures, which are not expected to be material.

In August 2018, the FASB issued ASU 2018-14 "Compensation - Retirement Benefits - Defined Benefit Plans - General" (Subtopic 715-20) which amends the disclosure requirements related to defined benefit pension and other postretirement plan. The Company will adopt this guidance effective January 1, 2021 and is currently determining the impacts that will be reflected in financial statement disclosures.

In August 2018, the FASB issued ASU 2018-15 "Intangibles - Goodwill and Other - Internal-Use Software" (Subtopic 350-40) - "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract" which aligns the requirements for capitalizing implementation costs incurred in a service contract hosting arrangement with those for capitalizing implementation costs incurred to develop or obtain internal-use software. The Company will adopt this guidance effective January 1, 2020 and is finalizing the impacts which are not expected to be material.

In December 2019, the FASB issued ASU 2019-12 "Income Taxes" (Topic 740) – "Simplifying the Accounting for Income Taxes" which simplifies the accounting for income taxes. The Company will adopt this guidance effective January 1, 2021 and is currently determining the impacts of the guidance on our consolidated financial statements.

Cash and cash equivalents

Cash and cash equivalents include highly-liquid investments with an original maturity of three months or less that are readily convertible into known amounts of cash.

Trade accounts receivable, net

Trade accounts receivable are stated at the invoiced amount, net of an allowance for doubtful accounts of $12.9 million and $11.2 million at December 31, 2019 and 2018, respectively. The allowance for doubtful accounts is estimated based on an individual assessment of collectability based on factors that include current ability to pay, bankruptcy and payment history, as well as a general reserve related to prior experience.

Inventories

Inventories consist primarily of products purchased for resale and are stated at the lower of cost or net realizable value. Inventory cost is determined based on the weighted average cost method and includes purchase price from producers net of rebates received, inbound freight and handling, and direct labor and other costs incurred to blend and repackage product, but excludes depreciation expense.

Property, plant and equipment, net

Property, plant and equipment are carried at historical cost, net of accumulated depreciation. Depreciation is recorded on a straight-line basis over the estimated useful life of each asset as follows:

Buildings	10-50 years
Main components of tank farms	5-40 years
Containers	2-15 years
Machinery and equipment	5-20 years
Furniture, fixtures and others	5-20 years
Information technology	3-10 years

The Company evaluates the useful life and carrying value of property, plant and equipment for impairment if an event occurs or circumstances change that would indicate the carrying value may not be recoverable. If the carrying amount of the asset group is not recoverable on an undiscounted cash flow basis, an impairment loss is recognized to the extent that the asset group's carrying amount exceeds its estimated fair value.

Goodwill and intangible assets

Goodwill represents the excess of the aggregate purchase price over the fair value of the net assets acquired in business combinations. Goodwill is tested for impairment annually on October 1, or between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. The Company's reporting units are USA, Canada, EMEA, Latin America and Asia-Pacific.

For each of the reporting units, the Company has the option to perform either the qualitative or the quantitative test. In the event a reporting unit fails the qualitative assessment, it is required to perform the quantitative test. If the fair value of the reporting unit is less than its carrying value, the reporting unit will recognize an impairment for the lesser of either the amount by which the reporting unit's carrying amount exceeds the fair value of the reporting unit or the reporting unit's goodwill carrying value.

Intangible assets have finite lives and are amortized over their respective useful lives of 2 to 20 years. Intangible assets are tested for impairment if an event occurs or circumstances change that indicates the carrying value may not be recoverable.

Short-term financing

Short-term financing includes bank overdrafts and short-term lines of credit.

Income taxes

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities and are measured using enacted tax rates and laws that are expected to be in effect when the differences reverse. Deferred tax assets are also recognized for the estimated future effects of tax loss carryforwards. The effect on deferred taxes of changes in tax rates is recognized in the period in which the revised tax rate is enacted.

The Company records valuation allowances to reduce deferred tax assets to the extent it believes it is more likely than not that such assets will not be realized. In making such determinations, the Company considers all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, forecasted and appropriate character of future taxable income, tax planning strategies, our experience with operating loss and tax credit carryforwards not expiring unused, tax planning strategies and the ability to carry back losses to prior years.

The Company is subject to the global intangible low tax income ("GILTI"), which is a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The Company treats taxes due on future US inclusions in taxable income related to GILTI as a current-period expense when incurred.

The Company recognizes interest and penalties related to unrecognized tax benefits within interest expense and warehousing, selling and administrative, respectively, in the accompanying consolidated statements of operations. Accrued interest and penalties are included in other accrued expenses and other long-term liabilities in the consolidated balance sheets.

Defined benefit plans

The Company sponsors several defined benefit plans and recognizes actuarial gains or losses, known as "mark to market" adjustments, at the measurement date, December 31. The mark to market adjustments primarily include gains and losses resulting from changes in discount rates and the difference between the expected and actual rate of return on plan assets. Settlement gains and losses are recognized in the period in which the settlement occurs.

The fair value of plan assets is used to calculate the expected return on assets component of the net periodic benefit cost.

Leases

At the commencement date of a lease, the Company recognizes a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. The lease liability is measured at the present value of lease payments over the lease term, including variable fees that are known or subject to a minimum floor. The lease liability includes lease component fees, while non-lease component fees are expensed as incurred for all asset classes. When a contract excludes an implicit rate, the Company utilizes an incremental borrowing rate based on information available at the lease commencement date including, lease term and geographic region. The initial valuation of the right-of-use ("ROU") asset includes the initial measurement of the lease liability, lease payments made in advance of the lease commencement date and initial direct costs incurred by the Company and excludes lease incentives.

Leases with an initial term of 12 months or less are classified as short-term leases and are not recorded on the consolidated balance sheets. The lease expense for short-term leases is recognized on a straight-line basis over the lease term.

Legal costs

We expense legal costs as incurred.

Environmental liabilities

Environmental liabilities are recognized for probable and reasonably estimable losses associated with environmental remediation. Incremental direct costs of the investigation, remediation effort and post-remediation monitoring are included in the estimated environmental liabilities. Expected cash outflows related to environmental remediation for the next 12 months and amounts for which the timing is uncertain are reported as current within other accrued expenses in the consolidated balance sheets. The long-term portion of environmental liabilities is reported within other long-term liabilities in the consolidated balance sheets on an undiscounted basis, except for sites for which the amount and timing of future cash payments are fixed or reliably determinable. Environmental remediation expenses are included within warehousing, selling and administrative expenses in the consolidated statements of operations, unless associated with disposed operations, in which case such expenses are included in other operating expenses, net.

Revenue recognition

Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring a good or providing a service. Since the term between invoicing and payment is less than a year, the Company has not recognized a significant financing component. Revenue for bill-and-hold arrangements is recognized if the Company has a substantive customer request, the materials are properly segregated and designated as belonging to the customer, materials are ready to be transferred to the customer and the Company is unable to direct the materials to service another customer.

Chemical Distribution

Revenue is recognized when performance obligations under the terms of the contract are satisfied, which generally occurs when goods are transferred to a customer under the terms of the sale. Net sales include product sales and billings for freight and handling charges, net of discounts, expected returns, customer price and volume incentives, and sales or other revenue-based taxes. The Company estimates price and volume incentives, which are expected to be provided to customers, and expected returns based on historical experience.

Crop Sciences

The Company generates revenue when control for products is transferred to customers. The amount of consideration recorded varies due to price movements and rights granted to customers to return product. Customer payment terms often extend through a growing season, which may be up to six months.

Transaction prices may move during an agricultural growing season and are affected by special offers or volume discounts, which affect the amount of consideration the Company will receive. Customers also may be provided rights to return eligible products. The Company estimates the expected returns and changes in the transaction price based on the combination of historical experience and the impact of weather on the current agriculture season. The adjustments to the transaction price and estimate of returns impacts revenues recognized.

Services

The Company generates revenue from services as they are performed and economic value is transferred to customers. Services provided to customers are primarily related to waste management services and warehousing services.

Foreign currency translation

Assets and liabilities of foreign subsidiaries are translated into US dollars at period-end exchange rates. Income and expense accounts of foreign subsidiaries are translated into US dollars at the average exchange rates for the period. The net exchange gains and losses arising on this translation are reflected as a component of currency translation within AOCI.

Transaction gains and losses are recognized in other expense, net in the consolidated statements of operations. Transaction gains and losses relating to intercompany borrowings that are an investment in a foreign subsidiary are reflected as a component of currency translation within AOCI in stockholders’ equity.

Stock-based compensation plans

The Company measures the total amount of employee stock-based compensation expense based on the grant date fair value of each award. Expense is recognized for each separately vesting tranche on a straight-line basis over the requisite service period, which is the shorter of the service period of the award or the period until the employees' retirement eligibility date. The Company recognizes forfeitures when incurred.

Fair value

Certain assets and liabilities are required to be recorded at fair value. The estimated fair values of those assets and liabilities have been determined using market information and valuation methodologies. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company’s market assumptions. There are three levels of inputs that may be used to measure fair value:

Level 1	Quoted prices for *identical* instruments in active markets.
Level 2	Quoted prices for *similar* instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuation in which all significant inputs and significant value drivers are observable in active markets.
Level 3	Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are *unobservable*.

Derivatives

The Company uses derivative financial instruments to manage risks associated with foreign currency and interest rate fluctuations. We do not use derivative instruments for speculative trading purposes. The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The fair value of interest rate swaps is determined by estimating the net present value of amounts to be paid under the agreement offset by the net present value of the expected cash inflows based on market rates and associated yield curves. For derivative contracts with the same counterparty where the Company has a master netting arrangement with the counterparty, the fair value of the asset/liability is presented on a net basis within the consolidated balance sheets. Changes in the fair value of derivative financial instruments are recognized in the consolidated statements of operations within interest expense or other expense, net, unless specific hedge accounting criteria are met. Cash flows associated with derivative financial instruments are recognized in the operating section of the consolidated statements of cash flows.

For derivatives designated as cash flow hedges, changes in the fair value of the derivative are recorded to AOCI and are reclassified to earnings when the underlying forecasted transaction affects earnings. For contracts designated as cash flow hedges, we reassess the probability of the underlying forecasted transactions occurring on a quarterly basis. For derivatives not designated as hedging instruments, all changes in fair value are recorded to earnings in the current period.

Earnings per share

Basic earnings per share is based on the weighted average number of common shares outstanding during each period. Diluted earnings per share is based on the weighted average number of common shares and dilutive common share equivalents outstanding during each period. The Company reflects common share equivalents relating to stock options, non-vested restricted stock and non-vested restricted stock units in its computation of diluted weighted average shares outstanding, unless the effect of inclusion is anti-dilutive. The effect of dilutive securities is calculated using the treasury stock method.

We consider restricted stock awards to be participating securities, since holders of such shares have non-forfeitable dividend rights in the event the Company declares a common stock dividend.

3. Business combinations

Year ended December 31, 2019

Acquisition of Nexeo Solutions

On February 28, 2019, the Company completed an acquisition of 100% of the equity interest of Nexeo Solutions, Inc., a leading global chemicals and plastics distributor. The acquisition expands and strengthens Univar Solutions' presence in North America and provides expanded opportunities to create the largest North American sales force in chemical and ingredients distribution and the broadest product offering.

The total purchase price of the acquisition was $1,814.8 million, composed of $1,201.0 million of cash paid (net of cash acquired of $46.8 million) and $613.8 million of newly issued shares of Univar Solutions common stock, which represented approximately 26.4 million shares, based on Univar Solutions' closing stock price of $23.29 on February 27, 2019. The final 26.4 million shares issued include the cancellation of 1.5 million shares in connection with the appraisal litigation settlement, see "Note 21: Commitments and contingencies" for more information.

The cash portion of the purchase price, acquisition related costs and repayment of approximately $936.3 million of Nexeo's debt and other long-term liabilities were funded using the proceeds from the issuance of Term B Loans, borrowings under the New Senior ABL Facility and the ABL Term Loan issued on February 28, 2019. Refer to "Note 18: Debt" for more information.

As of December 31, 2019, the Company updated the purchase price allocation to reflect fair value adjustments from the third-party valuation firm's report valuing Nexeo's tangible and intangible assets, working capital adjustments associated with the sale of the Nexeo plastics distribution business ("Nexeo Plastics") as well as tax adjustments. The initial accounting for this acquisition is considered preliminary and is subject to adjustments on receipt of additional information relevant to the acquisition to complete the opening balances for deferred income taxes. The preliminary values and measurement period adjustments are shown below:

(in millions)	At Acquisition Date	Measurement Period Adjustments	As Adjusted
Trade accounts receivable, net	$ 286.9	$ 9.4	$ 296.3
Inventories	149.0	1.2	150.2
Prepaid expenses and other current assets	27.2	38.2	65.4
Assets held for sale	1,030.9	(142.7)	888.2
Property, plant and equipment, net	227.4	34.9	262.3
Goodwill	682.2	(126.5)	555.7
Intangible assets, net	173.9	(35.2)	138.7
Other assets	37.0	0.4	37.4
Trade accounts payable	(133.7)	(4.0)	(137.7)
Other accrued expenses	(94.9)	(50.9)	(145.8)
Liabilities held for sale	(390.9)	169.4	(221.5)
Deferred tax liabilities	(102.3)	98.1	(4.2)
Other long-term liabilities	(77.9)	7.7	(70.2)
Purchase consideration, net of cash	$ 1,814.8	$ —	$ 1,814.8

Assets and liabilities held for sale are related to the Nexeo plastics distribution business. Nexeo Plastics was not aligned with the Company's strategic objectives and on March 29, 2019, the business was sold for total proceeds of $664.3 million, net of cash disposed. Refer to "Note 4: Discontinued operations and dispositions" for further information.

The Company recorded $555.7 million of goodwill, consisting of $540.1 million in the USA segment, $3.8 million in Canada and $11.8 million in LATAM. The goodwill is primarily attributable to expected synergies from combining operations. The Company expects approximately $108.3 million of goodwill to be deductible for income tax purposes.

The identified intangible assets were related to customer relationships which have a weighted-average amortization period of ten years.

The Company assumed 50.0 million warrants, equivalent to 25.0 million Nexeo shares, with an estimated aggregate fair value of $26.0 million at the February 28, 2019 closing date. The warrants were converted into the right to receive, upon exercise, the merger consideration consisting of approximately 7.6 million shares of Univar Solutions common stock plus cash. The warrants have an exercise price of $27.80 and will expire on June 9, 2021. The warrants as other long-term liabilities within the consolidated balance sheets. Refer to “Note 19: Fair value measurements” for more information.

The amounts of net sales and net income from continuing operations related to the Nexeo chemical distribution business, included in the Company’s consolidated statements of operations from March 1, 2019 to December 31, 2019 are as follows:

(in millions)		
Net sales	$	1,489.3
Net loss from continuing operations		(12.1)

The following unaudited pro forma financial information combines the unaudited results of operations as if the acquisition of Nexeo had occurred at the beginning of the periods presented below and exclude the results of operations related to Nexeo Plastics, as this divestiture was reflected as discontinued operations. Refer to “Note 4: Discontinued operations and dispositions” for additional information.

	Three months ended December 31,		Year ended December 31,	
(in millions)	2019	2018	2019	2018
Net sales	$ 2,155.0	$ 2,437.4	$ 9,612.9	$ 10,685.5
Net (loss) income from continuing operations	(54.8)	(72.9)	(94.3)	154.8

The pro forma financial information is for comparative purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place on January 1, 2018.

The unaudited pro forma information is based upon accounting estimates and judgments the Company believes are reasonable and reflects adjustments directly attributed to the business combination including amortization on acquired intangible assets, interest expense, transaction and acquisition related costs, depreciation related to purchase accounting fair value adjustments and the related tax effects.

Year ended December 31, 2018

In the year ended December 31, 2018, the Company completed two acquisitions. On January 4, 2018, the Company completed a $7.5 million acquisition of Kemetyl Norge Industri AS (“Kemetyl”) as well as a definitive asset purchase agreement with Kemetyl Aktiebolag, leading distributors of chemical products in the Nordic region which provide bulk and specialty chemicals. On May 31, 2018, the Company completed a $13.3 million acquisition of Earthoil Plantations Limited (“Earthoil”), a supplier of pure, organic, fair trade essential and cold-pressed vegetable seed oils. The accounting for both acquisitions was completed in 2019.

4. Discontinued operations and dispositions

Discontinued operations

On March 29, 2019, the Company completed the sale of the Nexeo Plastics to an affiliate of One Rock Capital Partners, LLC (“Buyer”) for total proceeds of $664.3 million (net of cash disposed of $2.4 million), including $26.7 million for a working capital adjustment. The Nexeo preliminary purchase price allocation is inclusive of these working capital adjustments. Refer to “Note 3: Business combinations” for more information.

In connection with the transaction, the Company entered into a Transition Services Agreement (TSA), a Warehouse Service Agreement (WSA) and Real Property Agreements with the Buyer which are designed to ensure and facilitate an orderly transfer of business operations and will terminate at various times, between six and twenty-four months and can be renewed with a maximum of two twelve-month periods. The income and expense for the services will be reported as other operating expenses, net in the consolidated statements of operations. The Real Property Agreements will have a maximum tenure of 3 years. These arrangements do not constitute significant continuing involvement in the plastics distribution business.

The following table summarizes the operating results of the Company’s discontinued operations related to the sale described above for the year ended December 31, 2019, as presented in “Net income from discontinued operations” on the consolidated statements of operations.

(in millions)	Year Ended December 31, 2019
External sales	$ 156.9
Cost of goods sold (exclusive of depreciation)	136.7
Outbound freight and handling	3.5
Warehousing, selling and administrative	7.9
Other expenses	1.4
Income from discontinued operations before income taxes	$ 7.4
Income tax expense from discontinued operations	2.0
Net income from discontinued operations	$ 5.4

There were no significant non-cash operating activities from the Company's discontinued operations related to the plastics distribution business.

Dispositions

On December 31, 2019, the Company completed the sale of the Environmental Sciences business to AEA Investors LP for total cash proceeds of $174.0 million (net of cash disposed of $0.7 million and $5.9 million of transaction expenses) plus a $5.0 million ($2.4 million present value) subordinated note receivable (the "Transaction") and subject to a working capital adjustment. The Company recorded a $41.4 million gain on sale of this business in the consolidated statements of operations and was included in the USA and Canada segments. The sale of the business did not meet the criteria to be classified as a discontinued operation in the Company's financial statements because the disposition did not represent a strategic shift, that has, or will have, a major effect on the Company's operations and financial results.

The following summarizes the income before income taxes attributable to the Environmental Sciences business:

(in millions)	Year ended December 31, 2019	2018	2017
Income before income taxes	$ 28.6	$ 28.2	$ 28.7

5. Revenue

The Company disaggregates revenues with customers by both geographic segments and revenue contract types. Geographic reportable segmentation is pertinent to understanding Univar Solutions' revenues, as it aligns to how the Company reviews the financial performance of its operations. Revenue contract types are differentiated by the type of good or service since the contractual terms necessary for revenue recognition are unique to each of the identified revenue contract types.

(in millions)	USA	Canada	EMEA	LATAM	Consolidated
	Year Ended December 31, 2019				
Chemical Distribution	$ 5,507.2	$ 852.8	$ 1,784.2	$ 443.7	$ 8,587.9
Crop Sciences	—	318.0	—	—	318.0
Services	321.3	47.0	1.3	11.4	381.0
Total external customer net sales	$ 5,828.5	$ 1,217.8	$ 1,785.5	$ 455.1	$ 9,286.9

(in millions)	USA	Canada	EMEA	LATAM	Consolidated
	Year Ended December 31, 2018				
Chemical Distribution	$ 4,775.2	$ 877.6	$ 1,974.4	$ 383.8	$ 8,011.0
Crop Sciences	—	381.6	—	—	381.6
Services	185.8	43.1	1.3	9.7	239.9
Total external customer net sales	$ 4,961.0	$ 1,302.3	$ 1,975.7	$ 393.5	$ 8,632.5

Deferred revenue

Deferred revenues are recognized as a contract liability when customers provide Univar Solutions with consideration prior to the Company satisfying a performance obligation. The following table provides information pertaining to the deferred revenue balance and account activity:

(in millions)		
Deferred revenue as of January 1, 2019	$	45.6
Deferred revenue as of December 31, 2019		65.5
Revenue recognized that was included in the deferred revenue balance at the beginning of the period		44.5

The deferred revenue balances are all expected to have a duration of one year or less and are recorded within the other accrued expenses line item of the consolidated balance sheet.

6. Other operating expenses, net

Other operating expenses, net consisted of the following items:

	Year ended December 31,		
(in millions)	2019	2018	2017
Acquisition and integration related expenses	$ 152.1	$ 22.0	$ 3.1
Stock-based compensation expense	25.1	20.7	19.7
Restructuring charges	2.6	4.8	5.5
Other employee severance costs	31.2	16.4	8.1
Other facility closure costs (1)	7.1	—	—
(Gain) loss on sale of property, plant and equipment and other assets	(9.9)	2.0	(11.3)
Saccharin legal settlement	62.5	—	—
Business transformation costs	—	—	23.4
Other	27.5	7.6	6.9
Total other operating expenses, net	$ 298.2	$ 73.5	$ 55.4

(1) Other facility closure costs includes $3.6 million recorded as an estimated withdrawal liability associated with a multi-employer pension plan related to an announced facility closure.

7. Restructuring charges

Restructuring charges relate to the implementation of several regional strategic initiatives aimed at streamlining the Company’s cost structure and improving its operations. These actions primarily resulted in workforce reductions, lease termination costs and other facility rationalization costs. Restructuring charges are recorded in other operating expenses, net in the consolidated statement of operations.

2018 Restructuring

During 2018, management approved a plan to consolidate departments resulting in restructuring charges of $3.2 million in USA, consisting of $3.1 million in severance costs and $0.1 million in other costs and in Other, the Company recorded $0.9 million, relating to severance costs. In 2019, under the same program the Company recorded restructuring charges of $2.4 million in USA and $0.3 million in Other consisting of severance costs. The Company expects to incur approximately $0.4 million of additional severance over the next year and expects this program to be substantially completed by 2020.

Also during the year ended December 31, 2018, the Company recorded restructuring charges of $0.9 million in EMEA relating to employee termination costs. The Company recorded restructuring charges of $0.1 million in facility exit costs during the year ended December 31, 2019 and reduced its estimate by $0.2 million within employee termination costs for this program. The actions associated with this program are complete as of December 31, 2019.

In 2018, the Company recorded restructuring charges of $0.7 million for the LATAM segment, consisting of $0.4 million in employee termination costs, $0.2 million in facility exit costs and $0.1 million in other exit costs. The actions associated with this program were completed as of December 31, 2018.

2014 to 2017 Restructuring

Between 2014 through 2017, management implemented several regional strategic initiatives aimed at streamlining the Company's cost structure and improving its operations. During the year ended December 31, 2018, the Company reduced its estimate in the amount of $0.9 million within facility exit costs relating to a favorable lease buyout for USA. The actions associated with the restructuring programs were completed as of June 30, 2018, although cash payments will be made into the future.

The following table summarizes the cumulative activities recorded through December 31, 2018 related to the Company's 2014 to 2017 restructuring charges by segment:

(in millions)	USA	Canada	EMEA	LATAM	Other	Total
Employee termination costs	$ 16.5	$ 5.7	$ 22.5	$ 6.2	$ 5.8	$ 56.7
Facility exit costs	21.3	—	3.7	0.2	—	25.2
Other exit costs	1.7	—	6.6	—	0.8	9.1
Total	$ 39.5	$ 5.7	$ 32.8	$ 6.4	$ 6.6	$ 91.0

The following tables summarize activity related to the restructuring liability:

(in millions)	January 1, 2019	Charge to earnings	Cash paid	Non-cash and other	December 31, 2019
Employee termination costs	$ 4.2	$ 2.5	$ (3.0)	$ —	$ 3.7
Facility exit costs	5.0	0.1	(3.2)	—	1.9
Other exit costs	0.2	—	—	—	0.2
Total	$ 9.4	$ 2.6	$ (6.2)	$ —	$ 5.8

(in millions)	January 1, 2018	Charge to earnings	Cash paid	Non-cash and other	December 31, 2018
Employee termination costs	$ 3.0	$ 5.3	$ (3.4)	$ (0.7)	$ 4.2
Facility exit costs	10.2	(0.7)	(4.4)	(0.1)	5.0
Other exit costs	(0.5)	0.2	(0.1)	0.6	0.2
Total	$ 12.7	$ 4.8	$ (7.9)	$ (0.2)	$ 9.4

Restructuring liabilities of $5.3 million and $5.9 million were classified as current in other accrued expenses and $0.5 million and $3.5 million were recorded in other long-term liabilities in the consolidated balance sheets as of December 31, 2019 and 2018, respectively. The long-term portion primarily consists of facility exit costs that are expected to be paid within the next five years.

While the Company believes the recorded restructuring liabilities are adequate, revisions to current estimates may be recorded in future periods based on new information as it becomes available.

8. Other expense, net

Other expense, net consisted of the following (losses) gains:

(in millions)	Year ended December 31, 2019	2018	2017
Pension mark to market loss [1][2]	$ (50.4)	$ (34.2)	$ (3.8)
Pension curtailment and settlement gains [1]	1.3	—	9.7
Non-operating retirement benefits [1][2]	2.2	11.0	9.9
Foreign currency transactions	(10.1)	(6.7)	(4.6)
Foreign currency denominated loans revaluation	17.5	(0.8)	(17.9)
Undesignated foreign currency derivative instruments [3]	(23.7)	1.1	0.3
Undesignated interest rate swap contracts [3]	(3.0)	—	(2.2)
Debt refinancing costs [4]	(1.2)	—	(5.3)
Other	(3.1)	(3.1)	(3.5)
Total other expense, net	$ (70.5)	$ (32.7)	$ (17.4)

(1) Refer to "Note 11: Employee benefit plans" for more information.
(2) Represents mark to market loss and non-operating retirement benefits for both the defined benefit pension and other postretirement benefit plans.
(3) Refer to "Note 20: Derivatives" for more information.
(4) Refer to "Note 18: Debt" for more information.

9. Income taxes

For financial reporting purposes, (loss) income before income taxes includes the following components:

(in millions)	Year ended December 31, 2019	2018	2017
(Loss) income before income taxes			
United States	$ (194.5)	$ 36.6	$ 1.5
Foreign	193.4	185.6	167.3
Total (loss) income before income taxes	$ (1.1)	$ 222.2	$ 168.8

The expense for income taxes is summarized as follows:

(in millions)	Year ended December 31, 2019	2018	2017
Current:			
Federal	$ 33.9	$ 13.8	$ 6.8
State	7.1	2.1	2.0
Foreign	39.2	31.2	28.5
Total current	$ 80.2	$ 47.1	$ 37.3
Deferred:			
Federal	$ 12.2	$ 6.5	$ 26.5
State	3.4	(0.5)	—
Foreign	8.7	(3.2)	(14.8)
Total deferred	$ 24.3	$ 2.8	$ 11.7
Total income tax expense from continuing operations	$ 104.5	$ 49.9	$ 49.0

For our continuing operations, differences between actual provisions for income taxes and provisions for income taxes at the US federal statutory rate (21.0% in 2019 and 2018 and 35.0% in 2017) were as follows:

	Year ended December 31,		
(in millions)	2019	2018	2017
US federal statutory income tax (benefit) expense applied to (loss) income before income taxes	$ (0.2)	$ 46.7	$ 59.1
State income taxes, net of federal benefit	10.7	1.1	1.4
Foreign tax rate differential	8.7	8.1	(18.0)
Effect of flow-through entities	30.6	(0.6)	8.9
Distributions from foreign subsidiaries	31.9	9.0	17.6
Global intangible low-taxed income	22.8	19.9	—
Gain on disposal	12.9	—	—
Change in valuation allowance, net	(18.8)	(11.6)	(18.1)
Foreign tax credit	(13.5)	(38.3)	(47.6)
Fines and penalties	5.6	—	0.2
Non-deductible employee expenses	4.4	3.9	2.5
Non-deductible acquisition costs	3.5	0.3	0.2
Shareholder settlements	2.7	—	—
Withholding and other taxes based on income	1.7	0.5	0.5
Warrants	1.5	—	—
Change in statutory income tax rates	(1.1)	—	(17.5)
Adjustment to prior year due to change in estimate	1.0	(0.8)	(0.5)
Net stock-based compensation	0.6	—	(3.7)
Foreign exchange rate remeasurement	(0.4)	(0.2)	0.3
Unrecognized tax benefits	(0.3)	(2.7)	(1.7)
Non-deductible expense	0.3	0.6	0.4
2017 US repatriation tax	—	13.0	76.5
Non-taxable interest income	—	(0.7)	(11.4)
Expiration of tax attributes	—	—	0.1
Foreign losses not benefited	—	—	0.7
Non-deductible interest expense	—	—	0.1
Other	(0.1)	1.7	(1.0)
Total income tax expense from continuing operations	$ 104.5	$ 49.9	$ 49.0
Effective income tax rate	(9,500.0)%	22.5 %	29.0 %

The consolidated deferred tax assets and liabilities are detailed as follows:

(in millions)	December 31, 2019	December 31, 2018
Deferred tax assets:		
Net operating loss carryforwards (“NOLs”)	$ 39.1	$ 49.4
Environmental reserves	20.9	22.9
Interest	17.3	25.9
Tax credit and capital loss carryforwards	60.1	57.8
Pension	79.6	66.3
Flow-through entities	—	2.7
Compensation	16.0	12.2
Inventory	5.4	4.5
Property, plant and equipment, net	1.2	4.8
Other temporary differences	20.9	17.0
Gross deferred tax assets	$ 260.5	$ 263.5
Valuation allowance	(87.5)	(106.3)
Deferred tax assets, net of valuation allowance	$ 173.0	$ 157.2
Deferred tax liabilities:		
Property, plant and equipment, net	$ (111.7)	$ (102.3)
Intangible assets	(78.3)	(63.6)
Other temporary differences	(18.0)	(9.4)
Deferred tax liabilities	$ (208.0)	$ (175.3)
Net deferred tax liability	$ (35.0)	$ (18.1)

As of December 31, 2019, the Company has approximately $39.1 million (tax effected) of NOLs. Approximately $2.4 million of NOLs will expire in the period 2020 through 2026, and approximately $4.1 million will expire in the period 2027 through 2039. The remaining $32.6 million has no expiration. Additionally, the Company has approximately $57.8 million of foreign tax credits. The Company does not expect future earnings of the appropriate character of taxable income which would allow it to utilize its excess FTC balance in future tax years, in addition to other required adjustments which reduce the amount of future foreign source income available to be offset by an FTC. Therefore, the Company will maintain a valuation allowance on the remaining provisional $57.8 million.

Foreign Tax Effects

The Company earns a significant amount of its operating income outside of the US. As of December 31, 2019, the Company is indefinitely reinvested with respect to its US directly-owned subsidiary earnings. Therefore, the Company has not recognized a deferred tax liability on its investment in foreign subsidiaries. The Company is subject to US income tax on substantially all foreign earnings under the GILTI provisions of the 2017 Tax Cut and Jobs Act, while a significant portion of remaining foreign earnings are eligible for the new dividends received deduction. As a result, a portion of any future repatriation of $264.8 million of undistributed earnings may be subject to US income tax, as well as state and local income taxes, and currency translation gains or losses. It is impracticable to calculate the exact amount. Additionally, gains and losses on any future taxable dispositions of US-owned foreign affiliates continue to be subject to US income tax.

Tax Contingencies

The changes in unrecognized tax benefits included in other long-term liabilities, excluding interest and penalties, are as follows:

(in millions)	Year ended December 31, 2019	Year ended December 31, 2018
Beginning balance	$ 0.4	$ 3.1
Increase for tax positions of prior years related to acquired business	1.3	—
Reductions due to the statute of limitations expiration	(0.1)	(2.7)
Foreign exchange	(0.5)	—
Ending balance	$ 1.1	$ 0.4

At December 31, 2019 and 2018, there are $1.1 million and $0.4 million of unrecognized tax benefits that if recognized would affect the annual effective tax rate. The Company files income tax returns in the US and various state and foreign jurisdictions. Generally, tax years are open for review by taxing authorities for a period of three years. As of December 31, 2019, the Company has limited audit activity for tax years back to 2007 and 2008, as well as for the periods 2012 through 2018. The Company continues to believe its positions are supportable; however, due to uncertainties in any tax audit outcome, the Company's estimates of the ultimate settlement of uncertain tax positions may change and the actual tax benefits may differ from the estimates.

The Company recognized $0.5 million, $0.1 million and $0.4 million of interest and/or penalties related to income tax matters in interest expense related to unrecognized tax benefits in the consolidated statements of operations for the years ended December 31, 2019, 2018 and 2017, respectively. The Company had $1.3 million and $1.1 million of interest and penalties reflected in the consolidated balance sheets as of December 31, 2019 and 2018, respectively.

10. Earnings per share

The following table presents the basic and diluted earnings per share computations:

	Year ended December 31,		
(in millions, except per share data)	2019	2018	2017
Basic:			
Net (loss) income from continuing operations	$ (105.6)	$ 172.3	$ 119.8
Net income from discontinued operations	5.4	—	—
Net (loss) income	$ (100.2)	$ 172.3	$ 119.8
Less: earnings allocated to participating securities	—	0.3	0.2
Earnings (loss) allocated to common shares outstanding	$ (100.2)	$ 172.0	$ 119.6
Weighted average common shares outstanding	164.1	141.2	140.2
Basic (loss) income per common share from continuing operations	$ (0.64)	$ 1.22	$ 0.85
Basic income per common share from discontinued operations	0.03	—	—
Basic (loss) income per common share	$ (0.61)	$ 1.22	$ 0.85
Diluted:			
Net (loss) income from continuing operations	$ (105.6)	$ 172.3	$ 119.8
Net income from discontinued operations	5.4	—	—
Net (loss) income	$ (100.2)	$ 172.3	$ 119.8
Less: earnings allocated to participating securities	—	—	—
Earnings (loss) allocated to common shares outstanding	$ (100.2)	$ 172.3	$ 119.8
Weighted average common shares outstanding	164.1	141.2	140.2
Effect of dilutive securities: stock compensation plans (2)	—	1.0	1.2
Weighted average common shares outstanding – diluted	164.1	142.2	141.4
Diluted (loss) income per common share from continuing operations	$ (0.64)	$ 1.21	$ 0.85
Diluted income per common share from discontinued operations	0.03	—	—
Diluted (loss) income per common share	$ (0.61)	$ 1.21	$ 0.85

(1) Stock options to purchase 3.0 million, 1.6 million, and 0.8 million shares of common stock were outstanding during the years ended December 31, 2019, 2018 and 2017, respectively and restricted stock of 0.8 million in 2019 and nil in both 2018 and 2017 were outstanding, but were not included in the calculation of diluted (loss) income per share as the impact of these stock options would have been anti-dilutive. Diluted shares outstanding also did not include 6.4 million shares of common stock issuable on the exercise of warrants because the warrants were out-of-the-money during the year ended December 31, 2019.

11. Employee benefit plans

Defined benefit pension plans

The Company sponsors defined benefit plans that provide pension benefits for employees upon retirement in certain jurisdictions including the US, Canada, United Kingdom and several other European countries. The US, Canada and United Kingdom defined benefit pension plans are closed to new entrants.

The following summarizes the Company's defined benefit pension plans' projected benefit obligations, plan assets and funded status:

	Domestic		Foreign		Total	
	Year ended December 31,		Year ended December 31,		Year ended December 31,	
(in millions)	2019	2018	2019	2018	2019	2018
Change in projected benefit obligations:						
Actuarial present value of benefit obligations at beginning of year	$ 625.7	$ 721.9	$ 537.5	$ 612.0	$ 1,163.2	$ 1,333.9
Service cost	—	—	2.4	2.7	2.4	2.7
Interest cost	27.2	27.3	15.6	15.4	42.8	42.7
Benefits paid	(33.5)	(37.5)	(28.4)	(26.7)	(61.9)	(64.2)
Plan amendments	—	—	—	2.5	—	2.5
Settlement	—	(38.5)	—	—	—	(38.5)
Curtailment	—	—	(1.3)	—	(1.3)	—
Actuarial loss (gain)	103.0	(47.5)	66.6	(33.6)	169.6	(81.1)
Foreign exchange and other	—	—	21.6	(34.8)	21.6	(34.8)
Actuarial present value of benefit obligations at end of year	$ 722.4	$ 625.7	$ 614.0	$ 537.5	$ 1,336.4	$ 1,163.2
Change in the fair value of plan assets:						
Plan assets at beginning of year	$ 428.6	$ 532.3	$ 522.2	$ 574.9	$ 950.8	$ 1,107.2
Actual return (loss) on plan assets	86.6	(39.9)	77.3	(19.7)	163.9	(59.6)
Contributions by employer	13.5	12.2	13.8	26.5	27.3	38.7
Benefits paid	(33.5)	(37.5)	(28.4)	(26.7)	(61.9)	(64.2)
Settlement	—	(38.5)	—	—	—	(38.5)
Foreign exchange and other	—	—	21.9	(32.8)	21.9	(32.8)
Plan assets at end of year	$ 495.2	$ 428.6	$ 606.8	$ 522.2	$ 1,102.0	$ 950.8
Funded status at end of year	$ (227.2)	$ (197.1)	$ (7.2)	$ (15.3)	$ (234.4)	$ (212.4)

Net amounts related to the Company's defined benefit pension plans recognized in the consolidated balance sheets consist of:

	Domestic		Foreign		Total	
	December 31,		December 31,		December 31,	
(in millions)	2019	2018	2019	2018	2019	2018
Overfunded net benefit obligation in other assets	$ —	$ —	$ 65.4	$ 46.1	$ 65.4	$ 46.1
Current portion of net benefit obligation in other accrued expenses	(3.5)	(3.5)	(2.1)	(2.0)	(5.6)	(5.5)
Long-term portion of net benefit obligation in pension and other postretirement benefit liabilities	(223.7)	(193.6)	(70.5)	(59.4)	(294.2)	(253.0)
Net liability recognized at end of year	$ (227.2)	$ (197.1)	$ (7.2)	$ (15.3)	$ (234.4)	$ (212.4)

The following table summarizes defined benefit pension plans with accumulated benefit obligations in excess of plan assets:

	Domestic		Foreign		Total	
	December 31,		December 31,		December 31,	
(in millions)	2019	2018	2019	2018	2019	2018
Accumulated benefit obligation	$ 722.4	$ 625.7	$ 202.0	$ 187.7	$ 924.4	$ 813.4
Fair value of plan assets	495.2	428.6	155.0	147.7	650.2	576.3

The following table summarizes defined benefit pension plans with projected benefit obligations in excess of plan assets:

	Domestic		Foreign		Total	
	December 31,		December 31,		December 31,	
(in millions)	2019	2018	2019	2018	2019	2018
Projected benefit obligation	$ 722.4	$ 625.7	$ 227.7	$ 209.1	$ 950.1	$ 834.8
Fair value of plan assets	495.2	428.6	155.0	147.7	650.2	576.3

The following table summarizes the components of net periodic benefit cost (income) recognized in the consolidated statements of operations related to defined benefit pension plans:

	Domestic			Foreign			Total		
	Year ended December 31,			Year ended December 31,			Year ended December 31,		
(in millions)	2019	2018	2017	2019	2018	2017	2019	2018	2017
Service cost (1)	$ —	$ —	$ —	$ 2.4	$ 2.7	$ 2.5	$ 2.4	$ 2.7	$ 2.5
Interest cost (2)	27.2	27.3	30.8	15.6	15.4	16.2	42.8	42.7	47.0
Expected return on plan assets (2)	(25.1)	(31.3)	(30.9)	(20.1)	(25.1)	(26.0)	(45.2)	(56.4)	(56.9)
Amortization of unrecognized prior service cost (credits) (2)	—	—	—	0.1	2.7	(0.2)	0.1	2.7	(0.2)
Settlement (3)	—	—	(9.7)	—	—	—	—	—	(9.7)
Curtailment (3)	—	—	—	(1.3)	—	—	(1.3)	—	—
Actuarial loss (4)	41.5	23.7	0.8	9.4	11.2	3.2	50.9	34.9	4.0
Net periodic benefit cost (income)	$ 43.6	$ 19.7	$ (9.0)	$ 6.1	$ 6.9	$ (4.3)	$ 49.7	$ 26.6	$ (13.3)

(1) Service cost is included in warehouse, selling and administrative expenses.
(2) These amounts are included in other expense, net, and represent non-operating retirement benefits.
(3) In 2017, the settlement gain is related to a lump sum offering accepted by participants. Both settlements and curtailments are included in other expense, net.
(4) Actuarial loss, or mark to market, includes measurement gains and losses resulting from changes since the prior measurement date in assumptions and plan experience as well as the difference between the expected and actual return on plan assets. These amounts are recorded in other expense, net.

The following summarizes pre-tax amounts included in AOCI at December 31, 2019 related to pension plan amendments:

(in millions)	Defined benefit pension plans
Net prior service cost	$ (1.1)

The following summarizes the amounts in AOCI at December 31, 2019 that are expected to be amortized as components of net periodic benefit cost (income) during the next year related to pension amendments:

(in millions)	Defined benefit pension plans
Prior service cost	$ (0.1)

Other postretirement benefit plan

The Company previously maintained a health care plan for retired employees in the US. The obligation associated with this plan as of December 31, 2019 and 2018 was $1.4 million and $1.8 million, respectively.

Actuarial assumptions

Defined benefit pension plans

The significant weighted average actuarial assumptions used in determining the benefit obligations and net periodic benefit cost (income) for the Company's defined benefit plans are as follows:

	Domestic		Foreign	
	December 31,		December 31,	
	2019	2018	2019	2018
Actuarial assumptions used to determine benefit obligations at end of period:				
Discount rate	3.28 %	4.47 %	2.14 %	2.92 %
Expected annual rate of compensation increase	N/A	N/A	2.85 %	2.85 %

	Domestic			Foreign		
	Year ended December 31,			Year ended December 31,		
	2019	2018	2017	2019	2018	2017
Actuarial assumptions used to determine net periodic benefit cost (income) for the period:						
Discount rate	4.47 %	3.87 %	4.39 %	2.92 %	2.61 %	2.84 %
Expected rate of return on plan assets	6.75 %	6.75 %	7.00 %	3.83 %	4.43 %	5.01 %
Expected annual rate of compensation increase	N/A	N/A	N/A	2.85 %	2.87 %	2.87 %

Discount rates are used to measure benefit obligations and the interest cost component of net periodic benefit cost (income). The Company selects its discount rates based on the consideration of equivalent yields on high-quality fixed income investments at each measurement date. Discount rates are based on a benefit cash flow-matching approach and represent the rates at which the Company's benefit obligations could effectively be settled as of the measurement date.

For domestic defined benefit plans, the discount rates are based on a hypothetical bond portfolio approach. The hypothetical bond portfolio is constructed to comprise AA-rated corporate bonds whose cash flow from coupons and maturities match the expected future plan benefit payments.

The discount rate for the foreign defined benefit plans are based on a yield curve approach. For plans in countries with a sufficient corporate bond market, the expected future benefit payments are matched with a yield curve derived from AA-rated corporate bonds, subject to minimum amounts outstanding and meeting other selection criteria. For plans in countries without a sufficient corporate bond market, the yield curve is constructed based on prevailing government yields and an estimated credit spread to reflect a corporate risk premium.

The expected long-term rate of return on plan assets reflects management's expectations on long-term average rates of return on funds invested to provide for benefits included in the benefit obligations. The long-term rate of return assumptions are based on the outlook for equity and fixed income returns, with consideration of historical returns, asset allocations, investment strategies and premiums for active management when appropriate. Assumptions reflect the expected rates of return at the beginning of the year.

Plan assets

Plan assets for defined benefit plans are invested in global equity and debt securities through professional investment managers with the objective to achieve targeted risk adjusted returns and to maintain liquidity sufficient to fund current benefit payments. Each funded defined benefit plan has an investment policy that is administered by plan trustees with the objective of meeting targeted asset allocations based on the circumstances of that particular plan. The investment strategy followed by the Company varies by country depending on the circumstances of the underlying plan. Less mature plan benefit obligations are funded by using more equity securities as they are expected to achieve long-term growth while exceeding inflation. More mature plan benefit obligations are funded using a higher allocation of fixed income securities as they are expected to produce current income with limited volatility. The Company has adopted a dynamic investment strategy whereby as the plan funded status improves, the investment strategy is migrated to more liability matching assets, and return seeking assets are reduced. Risk management practices include the use of multiple asset classes for diversification purposes. Specific guidelines for each asset class and investment manager are implemented and monitored.

The weighted average target asset allocation for defined benefit pension plans in the year ended December 31, 2019 is as follows:

	Domestic	Foreign
Asset category:		
Equity securities	50.0 %	15.3 %
Debt securities	45.0 %	79.3 %
Other	5.0 %	5.4 %
Total	100.0 %	100.0 %

Plan asset valuation methodologies are described below:

Fair value methodology	Description
Cash	This represents cash at banks at fair value.
Investment funds	Values are based on the net asset value of the units held at year end. The net asset values are based on the fair value of the underlying assets of the funds, minus their liabilities, and then divided by the number of units outstanding at the valuation date. The funds are traded on private markets that are not active; however, the unit price is based primarily on observable market data of the fund's underlying assets.
Insurance contracts	The fair value is based on the present value of the accrued benefit.

Domestic defined benefit plan assets

The following summarizes the fair value of domestic plan assets by asset category and level within the fair value hierarchy:

	December 31, 2019		
(in millions)	Total	Level 1	Level 2
Cash	$ 2.5	$ 2.5	$ —
Investments funds (1)	492.7	—	492.7
Total	$ 495.2	$ 2.5	$ 492.7

(1) This category includes investments in 30.2% in US equities, 19.7% in non-US equities, 45.0% in US corporate bonds and 5.1% in other investments.

	December 31, 2018		
(in millions)	Total	Level 1	Level 2
Cash	$ 2.4	$ 2.4	$ —
Investments funds (1)	426.2	—	426.2
Total	$ 428.6	$ 2.4	$ 426.2

(1) This category includes investments in 29.6% in US equities, 19.4% in non-US equities, 46.3% in US corporate bonds and 4.7% in other investments.

Foreign defined benefit plan assets

The following summarizes the fair value of foreign plan assets by asset category and level within the fair value hierarchy:

	December 31, 2019			
(in millions)	Total	Level 1	Level 2	Level 3
Cash	$ 3.4	$ 3.4	$ —	$ —
Investments:				
Investment funds (1)	581.2	—	581.2	—
Insurance contracts	22.2	—	—	22.2
Total investments	$ 603.4	$ —	$ 581.2	$ 22.2
Total	$ 606.8	$ 3.4	$ 581.2	$ 22.2

(1) This category includes investments in 2.1% in US equities, 14.1% in non-US equities, 13.5% in non-US corporate bonds, 68.6% in non-US government bonds and 1.7% in other investments.

Changes in the foreign plan assets valued using significant unobservable inputs (Level 3):

(in millions)	Insurance contracts
Balance at January 1, 2019	$ 18.5
Actual return to plan assets:	
Related to assets still held at year end	3.6
Purchases, sales and settlements, net	0.5
Foreign exchange	(0.4)
Balance at December 31, 2019	$ 22.2

The following summarizes the fair value of foreign plan assets by asset category and level within the fair value hierarchy:

	December 31, 2018			
(in millions)	Total	Level 1	Level 2	Level 3
Cash	$ 9.7	$ 9.7	$ —	$ —
Investments:				
Investment funds (1)	494.0	—	494.0	—
Insurance contracts	18.5	—	—	18.5
Total investments	$ 512.5	$ —	$ 494.0	$ 18.5
Total	$ 522.2	$ 9.7	$ 494.0	$ 18.5

(1) This category includes investments in 8.0% in US equities, 17.5% in non-US equities, 34.2% in non-US corporate bonds, 36.3% in non-US government bonds and 4.0% in other investments.

Changes in the foreign plan assets valued using significant unobservable inputs (Level 3):

(in millions)	Insurance contracts
Balance at January 1, 2018	$ 18.2
Actual return on plan assets:	
Related to assets still held at year end	0.7
Purchases, sales and settlements, net	0.4
Foreign exchange	(0.8)
Balance at December 31, 2018	$ 18.5

Contributions

The Company expects to contribute approximately $19.4 million and $3.5 million to its domestic and foreign defined benefit pension plan funds in 2020, respectively, including direct payments to plan participants in unfunded plans.

Benefit payments

Benefit payments that are projected to be paid from plan assets:

	Defined benefit pension plans		
(in millions)	Domestic	Foreign	Total
2020	$ 35.6	$ 17.5	$ 53.1
2021	36.7	17.1	53.8
2022	37.6	19.5	57.1
2023	38.5	19.4	57.9
2024	39.2	21.3	60.5
2024 through 2028	204.1	115.6	319.7

Defined contribution plans

The Company provides defined contribution plans and had contribution expense of $29.9 million, $32.0 million and $30.0 million in the years ended December 31, 2019, 2018 and 2017, respectively.

Multi-employer plans

The Company contributes to several multi-employer pension plans based on obligations arising from collective bargaining agreements. The risks of participating in these multi-employer plans are different from single-employer plans in the following aspects:

- Assets contributed to the multi-employer plan by the Company may be used to provide benefits to employees of other participating employers.
- If the Company stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers. Similarly, the Company could be liable for underfunded obligations of other, departed employers.
- If the Company chooses to stop participating in some of its multi-employer plans, it may be required to pay those plans an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The Company's participation in these plans for the annual period ended December 31, 2019 is outlined in the table below. The Pension Protection Act (PPA) zone status is the most recently available and is certified by the plan's actuary. Among other factors, plans in the "red zone" are less than 65 percent funded, plans in the "yellow zone" are less than 80 percent funded and plans in the "green zone" are at least 80 percent funded. There are no minimum contributions required for future periods by the collective-bargaining agreements, statutory obligations or other contractual obligations.

					Contributions [1]				
		PPA zone status			Year ended December 31,				
Pension fund	EIN/Pension plan number	2019	2018	FIP/RP status pending/ implemented	2019	2018	2017	Surcharge imposed	Expiration dates of collective bargaining agreement(s)
Western Conference of Teamsters Pension Plan	91-6145047/001	Green as of January 1, 2018	Green as of January 1, 2017	No	$ 1.5	$ 1.5	$ 1.5	No	April 30, 2020 to July 31, 2023
Central States, Southeast and Southwest Areas Pension Plan	36-6044243/001	Red as of January 1, 2018	Red as of January 1, 2017	Implemented	1.1	1.0	1.1	No	January 31, 2020 to March 31, 2023
New England Teamsters and Trucking Industry Pension Fund	04-6372430/001	Red as of October 1, 2017	Red as of October 1, 2016	Implemented	0.1	0.2	0.1	No	June 30, 2020
				Total contributions:	$ 2.7	$ 2.7	$ 2.7		

(1) The plan contributions by the Company did not represent more than five percent of total contributions to the plans as indicated in the plans' most recently available annual report.

12. Stock-based compensation

In May 2017, the Company replaced and succeeded the Univar Inc. 2015 Stock Incentive Plan (the "2015 Plan") with the Univar Inc. 2017 Omnibus Equity Incentive Plan (the "2017 Plan"). There were no changes to the outstanding awards related to the 2015 Plan and the Univar Inc. 2011 Stock Incentive Plan (together with the 2015 Plan and the 2017 Plan, the "Plans").

The 2017 Plan allows the Company to issue awards to employees, consultants, and directors of the Company and its subsidiaries. Awards may be made in the form of stock options, stock purchase rights, restricted stock, restricted stock units, performance shares, performance units, stock appreciation rights, dividend equivalents, deferred share units or other stock-based awards. As of December 31, 2019, there were 9.2 million shares authorized under the Plans.

For the years ended December 31, 2019, 2018 and 2017, the Company recognized total stock-based compensation expense within other operating expenses, net of $25.1 million, $20.7 million and $19.7 million, and a net tax (benefit) expense relating to stock-based compensation expense of $(2.4) million, $(2.6) million and $(3.7) million, respectively.

Stock options

Stock options expire ten years after the grant date and generally become exercisable over a four-year period or less, based on continued employment, with annual vesting. The exercise price of a stock option is determined based upon the fair value of the common stock at the time of each grant. Participants have no stockholder rights until the time of exercise. The Company will issue new shares upon exercise of stock options granted under the Plans.

The following reflects stock option activity under the Plans:

	Number of stock options		Weighted-average exercise price	Weighted-average remaining contractual term (in years)		Aggregate intrinsic value (in millions)
Outstanding at January 1, 2019	3,044,154	$	24.06			
Granted	1,204,550		21.77			
Exercised	(349,845)		18.74			
Forfeited	(208,234)		24.81			
Outstanding at December 31, 2019	3,690,625	$	23.77			
Exercisable at December 31, 2019	1,901,291	$	23.72	4.4	$	4.4
Expected to vest after December 31, 2019	1,789,334	$	23.83	8.7	$	0.7

As of December 31, 2019, the Company has unrecognized stock-based compensation expense related to non-vested stock options of approximately $3.4 million, which will be recognized over a weighted-average period of 0.9 years.

	Year ended December 31,					
(in millions)		2019		2018		2017
Total intrinsic value of stock options exercised	$	0.9	$	2.4	$	16.7
Fair value of stock options vested		7.9		8.1		7.8

Restricted stock

Non-vested restricted stock primarily relates to awards for members of the Company's Board of Directors which vest over 12 months. The grant date fair value of restricted stock is based on the market price of the common stock on that date. Non-vested shares of restricted stock may not be sold or transferred and are subject to forfeiture until vesting. Both vested and non-vested shares of restricted stock are included in the Company's shares outstanding. Dividend equivalents are available for non-vested shares of restricted stock if dividends are declared by the Company during the vesting period.

The following table reflects restricted stock activity under the Plans:

	Number of Restricted stock		Weighted average grant-date fair value
Non-vested at January 1, 2019	28,780	$	28.50
Granted	33,744		21.34
Vested	(28,780)		28.50
Forfeited	(5,624)		21.34
Non-vested at December 31, 2019	28,120	$	21.34

As of December 31, 2019, the Company has unrecognized stock-based compensation expense related to non-vested restricted stock awards of approximately $0.2 million, which will be recognized over a weighted-average period of 0.4 years.

The weighted-average grant-date fair value of restricted stock was $28.50 and $29.92 in 2018 and 2017, respectively.

Restricted stock units (RSUs)

RSUs awarded to employees generally vest in three or four equal annual installments, subject to continued employment. Each RSU converts into one share of Univar Solutions common stock on the applicable vesting date. RSUs may not be sold, pledged or otherwise transferred until they vest and are subject to forfeiture. The grant date fair value is based on the market price of Univar Solutions stock on that date.

The following table reflects RSUs activity under the Plans:

	Number of Restricted Stock Unit	Weighted-average grant-date fair value
Non-vested at January 1, 2019	801,200	$ 23.98
Granted	719,183	21.99
Vested	(364,820)	20.89
Forfeited	(66,145)	24.86
Non-vested at December 31, 2019	1,089,418	$ 23.67

As of December 31, 2019, the Company has unrecognized stock-based compensation expense related to non-vested RSUs awards of approximately $10.3 million, which will be recognized over a weighted-average period of 1.2 years.

Performance-based restricted stock units (PRSUs)

The Company awards performance based shares to certain employees. These awards vest upon the passage of time and the achievement of performance criteria. For grants with Company based performance criteria, the vesting period is over three years with some shares vesting over each annual period. We review progress toward the attainment of the performance criteria each quarter during the vesting period. When it is probable the minimum performance criteria for the award will be achieved, we begin recognizing the expense equal to the proportionate share of the total fair value. The total expense recognized over the duration of performance awards will equal the date of grant multiplied by the number of shares ultimately awarded based on the level of attainment of the performance criteria. For grants with market performance criteria, the fair value is determined on the grant date and is calculated using the same inputs for expected volatility, and risk-free rate as stock options, with a duration of two years. The total expense recognized over the duration of the award will equal the fair value, regardless if the market performance criteria is met.

The following table reflects PRSUs activity under the Plans:

	Number of Performance-Based Restricted Stock Unit	Weighted-average grant-date fair value
Non-vested at January 1, 2019	256,568	$ 27.18
Granted	275,725	22.71
Vested	(5,343)	30.98
Forfeited	(7,122)	26.90
Non-vested at December 31, 2019	519,828	$ 24.77

As of December 31, 2019, the Company has unrecognized stock-based compensation expense related to non-vested PRSUs awards of approximately $1.9 million, which will be recognized over a weighted-average period of 1.6 years.

Fair value

	Year ended December 31,		
(in millions)	**2019**	**2018**	**2017**
Fair value of restricted stock, RSUs and PRSUs vested	8.6	11.8	22.8

Employee stock purchase plan

The Univar Solutions Inc. Employee Stock Purchase Plan, or ESPP, authorizing the issuances of up to 2.0 million shares of the Company’s common stock allows qualified participants to purchase the Company’s common stock at 95% of its market price during the last day of two offering periods in each calendar year. The first offering period is January through June, and the second from July through December. As of December 31, 2019, the total number of shares issued under the plan for the two offering periods in 2019 was 64,740 shares.

Stock-based compensation fair value assumptions

The fair value of the Company’s stock that is factored into the fair value of stock options and utilized for restricted stock, RSUs and PRSUs with internally developed performance conditions is based on the grant date closing price on the New York Stock Exchange.

The Black-Scholes-Merton option valuation model was used to calculate the fair value of stock options. The weighted average grant-date fair value of stock options was $6.31, $8.69 and $8.40 for the years ended December 31, 2019, 2018 and 2017 respectively. The weighted-average assumptions used under the Black-Scholes-Merton option valuation model were as follows:

	Year ended December 31,		
	2019	2018	2017
Risk-free interest rate (1)	2.6 %	2.7 %	2.1 %
Expected dividend yield	—	—	—
Expected volatility (2)	23.7 %	23.2 %	25.5 %
Expected term (years) (3)	6.0	6.0	5.9

(1) The risk-free interest rate is based on the US Treasury yield for a term consistent with the expected term of the stock options at the time of grant.
(2) As the Company does not have sufficient historical volatility data, the expected volatility is based on the average historical data of a peer group of public companies over a period equal to the expected term of the stock options.
(3) As the Company does not have sufficient historical exercise data under the Plans, the expected term is based on the average of the vesting period of each tranche and the original contract term of 10 years.

13. Accumulated other comprehensive loss

The following table presents the changes in accumulated other comprehensive loss by component, net of tax.

(in millions)	Cash flow hedges	Defined benefit pension	Currency translation	Total AOCI
Balance as of January 1, 2017	$ —	$ 1.2	$ (391.1)	$ (389.9)
Other comprehensive income (loss) before reclassifications	4.4	(2.2)	107.1	109.3
Amounts reclassified from accumulated other comprehensive loss	2.3	(0.2)	—	2.1
Net current period other comprehensive income (loss)	$ 6.7	$ (2.4)	$ 107.1	$ 111.4
Balance as of December 31, 2017	$ 6.7	$ (1.2)	$ (284.0)	$ (278.5)
Impact due to adoption of ASU 2017-12 (1)	0.5	—	—	0.5
Other comprehensive income (loss) before reclassifications	8.3	(2.0)	(97.0)	(90.7)
Amounts reclassified from accumulated other comprehensive loss	(6.6)	2.1	—	(4.5)
Net current period other comprehensive income (loss)	$ 2.2	$ 0.1	$ (97.0)	$ (94.7)
Balance as of December 31, 2018	$ 8.9	$ (1.1)	$ (381.0)	$ (373.2)
Impact due to adoption of ASU 2018-02 (2)	$ 1.5	$ —	$ (4.7)	$ (3.2)
Other comprehensive (loss) income before reclassifications	(23.6)	—	22.8	(0.8)
Amounts reclassified from accumulated other comprehensive loss	(2.2)	0.1	—	(2.1)
Net current period other comprehensive (loss) income	$ (24.3)	$ 0.1	$ 18.1	$ (6.1)
Balance as of December 31, 2019	$ (15.4)	$ (1.0)	$ (362.9)	$ (379.3)

(1) Adjusted due to the adoption of ASU 2017-12 “Targeted Improvements to Accounting for Hedging Activities” on January 1, 2018.
(2) Adjusted due to the adoption of ASU 2018-02 on January 1, 2019. Refer to “Note 2: Significant accounting policies” for more information.

The following is a summary of the amounts reclassified from accumulated other comprehensive loss to net (loss) income.

(in millions)	Year ended December 31, 2019 (1)	Year ended December 31, 2018 (1)	Year ended December 31, 2017 (1)	Location of impact on statement of operations
Amortization of defined benefit pension items:				
Prior service cost (credits)	$ 0.1	$ 2.7	$ (0.2)	Other expense, net
Tax benefit	—	(0.6)	—	Income tax expense
Net of tax	$ 0.1	$ 2.1	$ (0.2)	
Cash flow hedges:				
Interest rate swap contracts	$ (8.0)	$ (8.1)	$ 3.8	Interest expense
Cross-currency swap contracts	5.2	—	—	Interest expense and other expense, net
Tax expense	0.6	1.5	(1.5)	Income tax expense
Net of tax	$ (2.2)	$ (6.6)	$ 2.3	
Total reclassifications for the period	$ (2.1)	$ (4.5)	$ 2.1	

(1) Amounts in parentheses indicate credits to net income in the consolidated statement of operations.

Refer to “Note 11: Employee benefit plans” for additional information regarding the amortization of defined benefit pension items, “Note 20: Derivatives” for cash flow hedging activity.

14. Property, plant and equipment, net

Property, plant and equipment, net consisted of the following:

(in millions)	December 31, 2019	December 31, 2018
Land and buildings	$ 875.9	$ 790.9
Tank farms	283.9	276.0
Machinery, equipment and other	983.8	836.7
Less: Accumulated depreciation	(1,037.9)	(970.1)
Subtotal	$ 1,105.7	$ 933.5
Work in progress	46.7	22.3
Property, plant and equipment, net	$ 1,152.4	$ 955.8

15. Goodwill and intangible assets

Goodwill

The following is a summary of the activity in goodwill by segment.

(in millions)	USA	Canada	EMEA	LATAM	Total
Balance, January 1, 2018	$ 1,325.2	$ 468.7	$ 1.2	$ 23.3	$ 1,818.4
Additions	—	—	7.6	—	7.6
Purchase price adjustments	—	—	—	(3.2)	(3.2)
Other adjustments	—	(2.4)	—	—	(2.4)
Foreign exchange	—	(36.4)	(0.5)	(2.8)	(39.7)
Balance, December 31, 2018	$ 1,325.2	$ 429.9	$ 8.3	$ 17.3	$ 1,780.7
Additions	540.1	3.8	—	11.8	555.7
Other adjustments	(63.0)	(14.2)	—	—	(77.2)
Foreign exchange	—	21.6	0.1	(0.1)	21.6
Balance, December 31, 2019	$ 1,802.3	$ 441.1	$ 8.4	$ 29.0	$ 2,280.8

Additions to goodwill in 2019 related to the acquisition of Nexeo and in 2018 related to the acquisition of Kemetyl and Earthoil. Refer to "Note 3: Business combinations" for further information. The purchase price adjustments in 2018 related to the Tagma acquisition. Other adjustments to goodwill in 2019 relate to the disposition of the Environmental Sciences business and in 2018 relate to immaterial dispositions. Accumulated impairment losses on goodwill were $253.9 million, $255.6 million and $271.3 million at December 31, 2019, December 31, 2018 and January 1, 2018, respectively.

As of October 1, 2019, the Company performed its annual impairment review and concluded the fair value exceeded the carrying value for all reporting units. There were no events or circumstances from the date of the assessment through December 31, 2019 that would affect this conclusion.

Intangible assets, net

The gross carrying amounts and accumulated amortization of the Company's intangible assets were as follows:

	December 31, 2019			December 31, 2018		
(in millions)	Gross	Accumulated amortization	Net	Gross	Accumulated amortization	Net
Customer relationships	$ 986.4	$ (680.8)	$ 305.6	$ 846.1	$ (620.3)	$ 225.8
Other	182.0	(167.4)	14.6	175.1	(162.8)	12.3
Total intangible assets	$ 1,168.4	$ (848.2)	$ 320.2	$ 1,021.2	$ (783.1)	$ 238.1

Other intangible assets consist of intellectual property trademarks, trade names, producer relationships and contracts, non-compete agreements and exclusive distribution rights.

The estimated annual amortization expense in each of the next five years is as follows:

(in millions)	
2020	$ 54.1
2021	50.5
2022	45.3
2023	41.4
2024	32.0

16. Impairment charges

During the third quarter of 2019, the Company announced closure of certain production facilities in USA. The Company determined that these decisions indicated a triggering event, requiring the assessment of recoverability of these long-lived assets. Testing the assets for recoverability involves developing estimates of future cash flows directly associated with, and that are expected to arise as a direct result of, the use and eventual disposition of the assets. As the inputs for testing recoverability are largely based on management's judgments and are not generally observable in active markets, the Company considers such measurements to be Level 3 measurements in the fair value hierarchy.

The Company tested the recoverability of its long-lived assets and determined the carrying amount of the assets exceeded the sum of the expected undiscounted future cash flows. As a result, the Company recorded a non-cash, pretax impairment charge of $7.0 million related to property, plant and equipment within its consolidated statements of operations during the year ended December 31, 2019.

17. Other accrued expenses

As of December 31, 2019, other accrued expenses that were greater than five percent of total current liabilities consisted of current tax liabilities of $87.1 million, comprised of income, VAT and local indirect taxes payable and customer prepayments and deposits of $81.5 million. As of December 31, 2018, there were no components within other accrued expenses that were greater than five percent of total current liabilities.

18. Debt

Short-term financing

Short-term financing consisted of the following:

(in millions)	December 31, 2019	December 31, 2018
Amounts drawn under credit facilities	$ 0.5	$ 4.7
Bank overdrafts	0.2	3.4
Total	$ 0.7	$ 8.1

The weighted average interest rate on short-term financing was 3.8% and 3.0% as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, the Company had $158.5 million and $139.4 million, respectively, in outstanding letters of credit.

Long-term debt

Long-term debt consisted of the following:

(in millions)	December 31, 2019	December 31, 2018
Senior Term Loan Facilities:		
Term B-3 Loan due 2024, variable interest rate of 4.05% and 4.77% at December 31, 2019 and December 31, 2018, respectively	$ 1,438.0	$ 1,747.8
Term B-5 Loan due 2026, variable interest rate of 3.80% at December 31, 2019	400.0	—
Asset Backed Loan (ABL) Facilities:		
North American ABL Facility due 2024, variable interest rate of 5.25% at December 31, 2019	200.0	—
Canadian ABL Term Loan due 2022, variable interest rate of 4.31% at December 31, 2019	130.9	—
Euro ABL Facility due 2023, variable interest rate of 1.75% at December 31, 2018	—	58.5
North American ABL Facility due 2020, variable interest rate of 4.19% at December 31, 2018	—	134.7
Senior Unsecured Notes:		
Senior Unsecured Notes due 2027, fixed interest rate of 5.13% at December 31, 2019	500.0	—
Senior Unsecured Notes due 2023, fixed interest rate of 6.75% at December 31, 2018	—	399.5
Finance lease obligations	71.2	54.8
Total long-term debt before discount	$ 2,740.1	$ 2,395.3
Less: unamortized debt issuance costs and discount on debt	(26.3)	(23.2)
Total long-term debt	$ 2,713.8	$ 2,372.1
Less: current maturities	(25.0)	(21.7)
Total long-term debt, excluding current maturities	$ 2,688.8	$ 2,350.4

The weighted average interest rate on long-term debt was 4.25% and 4.29% as of December 31, 2019 and 2018, respectively.

As of December 31, 2019, future contractual maturities of long-term debt, excluding finance lease obligations, are as follows:

(in millions)		
2020	$	4.0
2021		134.9
2022		4.0
2023		4.0
2024		1,642.0
Thereafter		880.0
Total	$	2,668.9

Refer to “Note 22: Leasing” for additional information regarding finance lease obligations.

Senior Term Loan Facilities

In the first quarter of 2019 to finance the acquisition of Nexeo, the Company entered into the Fourth Amendment to its credit agreement, dated July 1, 2015, which provided a new Term B-4 Loan facility in an aggregate principal amount of $300.0 million (“Term B-4 Loan”) and a new Euro Term B-2 Loan facility in an aggregate principal amount of €425.0 million (“EUR Term B-2 Loan”). In the second quarter of 2019, using the proceeds from the sale of Nexeo Plastics, the Company repaid a portion of its outstanding EUR Term B-2, Term B-3 and Term B-4 Loans. As a result of the prepayment, no mandatory principal payments are required until 2024 for the Term B-3 Loan.

In the fourth quarter of 2019, the Company repaid in full the remaining Term B-4 Loan and entered into the Fifth Amendment which provided a new Term B-5 Loan facility in an aggregate principal amount of $400.0 million that matures on July 1, 2026 (“Term B-5 Loan”). The proceeds from the new Term B-5 loan were used to repay in full the remaining EUR Term B-2 Loan. The Term B-5 Loan is payable in quarterly installments of 0.25% of the aggregate initial principal amount. The interest rate applicable to the Term Loan B-5 is based on, at the borrower’s option, (i) a fluctuating rate of interest determined by reference to a base rate plus an applicable margin equal to 1.00% or (ii) a Eurocurrency rate plus an applicable margin equal to 2.00%. The Company can repay the Term B-5 Loan in whole or part without penalty.

As a result of the Fifth Amendment of the Term B-5 Loan and the repayment of the Term B-4 Loan, the Company recognized a loss on extinguishment of debt of $9.4 million during the year ended December 31, 2019.

ABL Facilities

In 2019, the Company amended and restated its July 28, 2015 ABL credit facility. The 2019 amendment, which matures on February 28, 2024, provides a five year senior secured ABL credit facility in an aggregate amount of $1.2 billion and $325.0 million, for the US and Canadian revolving commitments (“North American ABL Facility”), respectively, and a three year $175.0 million aggregate secured Canadian dollar ABL term loan facility (“ABL Term Loan”) (collectively, the “New Senior ABL Facility”). Borrowing availability is determined by a borrowing base consisting of eligible inventory and eligible accounts receivable.

The interest rate on the ABL Term Loan is on a quarterly adjusted rate of interest determined by reference to either a prime or BA rate, at our option, plus an applicable margin. For the US and Canadian revolving loans, the adjusted interest rate is a base or eurocurrency rate plus an applicable margin. The ABL Term Loan is payable in quarterly installments with a final maturity on February 28, 2022.

As a result of the 2019 amendment related to the New Senior ABL Facility, the Company recognized a loss on extinguishment of debt of $0.7 million during the year ended December 31, 2019.

Senior Unsecured Notes

During 2019, the Company issued $500.0 million in Senior Unsecured Notes, due December 1, 2027 (“2027 Senior Notes”), with a fixed interest rate of 5.125%. The net proceeds were used to repay all $399.5 million principal outstanding under the 6.75% Notes due 2023 and a portion of the debt outstanding under the North American ABL Facility. The Company can prepay the 2027 Senior Notes in whole or part at a premium on or after December 1, 2022 and without a premium on or after December 1, 2024.

As a result of this transaction, we recorded a loss on extinguishment of debt of $9.7 million during the year ended December 31, 2019.

Borrowing availability and assets pledged as collateral

Availability of our credit facilities is determined based upon available qualifying collateral, as defined in the North American ABL Facility and Euro ABL Facility credit agreement.

Unused line fees are as follows:

	December 31, 2019	December 31, 2018
$1.525 billion North American ABL Facility	0.300 %	0.375 %
€200 million Euro ABL Facility	0.375 %	0.375 %

The North American ABL Facility is secured by a first priority lien of accounts receivable and inventories of our US and Canadian operating subsidiaries. In addition, 65% of the shares of certain foreign subsidiaries have been pledged as security.

The Senior Term Loan Facilities are secured by substantially all of the assets of the US operating and management subsidiaries and are secured by a second priority lien on such accounts receivable and inventory.

The Euro ABL Facility is primarily secured by accounts receivable and inventories of the Company’s subsidiaries in Belgium, France, the Netherlands, and United Kingdom.

Assets pledged are as follows:

(in millions)	December 31, 2019	December 31, 2018
Cash	$ 230.8	$ 45.5
Trade accounts receivable, net	981.4	906.1
Inventories	668.8	674.0
Prepaid expenses and other current assets	206.3	96.9
Property, plant and equipment, net	956.1	743.0
Total	$ 3,043.4	$ 2,465.5

Debt covenants

The Company is in compliance with all debt covenants. The North American ABL Facility and ABL Term Loan are subject to comply with a minimum fixed charge coverage ratio. As of December 31, 2019 and 2018, we exceeded the minimum ratio and therefore the financial covenant remains inapplicable.

Other Information

The fair values of debt were based on current market quotes for similar borrowings and credit risk adjusted for liquidity, margins, and amortization, as necessary and are classified as level 2 in the fair value hierarchy.

(in millions)	December 31, 2019 Carrying amount	December 31, 2019 Fair value	December 31, 2018 Carrying amount	December 31, 2018 Fair value
Fair value of debt	$ 2,713.8	$ 2,770.7	$ 2,372.1	$ 2,314.3

The Company is exposed to credit loss and loss of liquidity availability if the financial institutions or counterparties issuing us debt securities fail to perform. We minimize exposure to these credit risks by dealing with a diversified group of investment grade financial institutions. We manage credit risk by monitoring the credit ratings and market indicators of credit risk of our lending counterparties. We do not anticipate any non-performance by any of the counterparties.

19. Fair value measurements

The Company classifies its financial instruments according to the fair value hierarchy described in "Note 2: Significant accounting policies."

Items measured at fair value on a recurring basis

The following table presents the Company's gross assets and liabilities measured on a recurring basis and classified as level 2 within the fair value hierarchy:

(in millions)	Balance Sheet Location	Derivative Assets December 31, 2019	Derivative Assets December 31, 2018	Balance Sheet Location	Derivative Liabilities December 31, 2019	Derivative Liabilities December 31, 2018
Designated Derivatives:						
Cross currency swap contracts	Prepaid expenses and other current assets	$ 7.2	$ —	Other long-term liabilities	$ 12.1	$ —
Interest rate swap contracts	Prepaid expenses and other current assets	—	12.4	Other accrued expenses	6.4	—
Interest rate swap	Other assets	—	1.5	Other long-term liabilities	14.0	—
Undesignated Derivatives:						
Foreign currency contracts	Prepaid expenses and other current assets	$ 0.5	$ 0.3	Other accrued expenses	$ 1.0	$ 0.2
Cross currency swap contracts	Prepaid expenses and other current assets	0.4	—	Other long-term liabilities	0.6	—
Interest rate swap contracts	Prepaid expenses and other current assets	—	—	Other accrued expenses	1.0	—
Interest rate swap contracts	Other assets	—	—	Other long-term liabilities	1.9	—

The net amounts by legal entity related to foreign currency contracts included in prepaid and other current assets were $0.2 million and $0.3 million as of December 31, 2019 and 2018, respectively. The net amounts related to foreign currency contracts included in other accrued expenses were $0.7 million and $0.2 million as of December 31, 2019 and 2018, respectively.

The following table is a reconciliation of the fair value measurements that use significant unobservable inputs (Level 3), which consist of the warrant liability related to the Nexeo acquisition for 2019 and contingent consideration liabilities (i.e. earn-outs) related to the Tagma acquisition for 2018.

(in millions)	Warrant Liability 2019	Contingent Consideration 2018
Fair value as of January 1	$ —	$ 0.4
Additions	26.0	—
Fair value adjustments	7.0	1.0
Payments	—	(1.4)
Fair value as of December 31	$ 33.0	$ —

The fair value of the warrant liability is calculated using the Black-Scholes-Merton option valuation model. The fair value of the warrants was computed using the following assumptions: expected option life two years, volatility 27.48%, and risk-free interest rate of 1.58%. As the Company does not have sufficient historical volatility data, the expected volatility is based on the average historical data of a peer group of public companies over a period equal to the expected term of the warrants. The risk-free interest rate assumption was based on the US Treasury rates.

Fair value adjustments are recorded within other operating expenses, net in the consolidated statement of operations. Changes in the fair value of contingent consideration are recorded in the other, net line item of the operating activities within the consolidated statement of cash flows. Cash payments up to the amount of the original acquisition value are recorded within financing activities of the consolidated statement of cash flows. The portion of contingent consideration cash payments in excess of the original acquisition value are recorded within operating activities of the consolidated statement of cash flows.

20. Derivatives

Foreign currency derivatives

The Company uses forward currency contracts to hedge earnings from the effects of foreign exchange relating to certain of the Company's intercompany and third-party receivables and payables denominated in a foreign currency. These derivative instruments are not formally designated as hedges by the Company and the terms of these instruments range from one to three months.

Interest rate swaps

The objective of the designated interest rate swap contracts is to offset the variability of cash flows in LIBOR indexed debt interest payments attributable to changes in the aforementioned benchmark interest rate related to the Term B-3 Loan and a portion of debt outstanding under the North American ABL Facility. The swaps have maturities at various dates through June 2024. On December 17, 2019, the Company terminated $750.0 million of the 2017 swaps resulting in a $1.1 million gain. As the hedge was considered to be effective and the forecasted transaction was considered probable of occurring, part of the gain remained in accumulated other comprehensive loss and will be amortized as a reduction to interest expense over the term of the forecasted Term B Loan.

Cross currency swap contracts

Cross currency swap contracts are used to effectively convert the Term B-5 Loan's principal amount of floating rate US dollar denominated debt of $400.0 million, including interest payments, to fixed-rate Euro denominated debt maturing in November 2024. As of December 31, 2019, approximately 95% of the cross currency swaps are designated as a cash flow hedge.

The Company uses both undesignated interest rate swap contracts and cross currency swaps to manage interest rate variability and mitigate foreign exchange exposure.

Notional amounts and fair value of derivative instruments

The following table presents the notional amounts of the Company's outstanding derivative instruments by type:

	December 31,	
(in millions)	**2019**	**2018**
Derivatives designated as hedging instruments:		
Interest rate swap contracts	$ 1,050.0	$ 2,000.0
Cross currency swap contracts	381.0	—
Derivatives not designated as hedging instruments:		
Interest rate swap contracts	200.0	—
Foreign currency derivatives	141.4	108.1
Cross currency swap contracts	19.0	—

The fair values of derivative instruments on the consolidated statements of operations and the consolidated statements of comprehensive income for the years ended December 31, 2019, 2018 and 2017 are as follows:

		Amount of gain (loss) reclassified from other comprehensive loss into income (effective and ineffective portion)			
		Year ended December 31,			
Derivatives in cash flow hedging relationships	**Income statement classification**	**2019**	**2018**	**2017**	**Amount to be reclassified to consolidated statement of operations within the next 12 months**
Interest rate swap contracts	Interest expense	$ 8.0	$ 8.1	$ (3.8)	$ (6.4)
Cross currency swap contracts	Interest expense	0.7	—	—	7.2
	Other expense, net	(5.9)	—	—	—

Refer to "Note 8: Other expense, net" for the gains and losses related to derivatives not designated as hedging instruments and "Note 19: Fair value measurements" regarding the gross and net balances of derivative instruments.

21. Commitments and contingencies

Litigation

In the ordinary course of business the Company is subject to pending or threatened claims, lawsuits, regulatory matters and administrative proceedings from time to time. Where appropriate the Company has recorded provisions in the consolidated financial statements for these matters. The liabilities for injuries to persons or property are in some instances covered by liability insurance, subject to various deductibles and self-insured retentions.

The Company is not aware of any claims, lawsuits, regulatory matters or administrative proceedings, pending or threatened, that are likely to have a material effect on its overall financial position, results of operations, or cash flows. However, the Company cannot predict the outcome of any present or future claims or litigation or the potential for future claims or litigation and adverse developments could negatively impact earnings or cash flows in a particular future period.

The Company is subject to liabilities from claims alleging personal injury from exposure to asbestos. The claims result primarily from an indemnification obligation related to Univar Solutions USA Inc.'s ("Univar") 1986 purchase of McKesson Chemical Company from McKesson Corporation ("McKesson"). Univar's obligation to defend and indemnify McKesson for settlements and judgments arising from asbestos claims is the amount which is in excess of applicable insurance coverage, if any, which may be available under McKesson's historical insurance coverage. Univar is also a defendant in a small number of asbestos claims. As of December 31, 2019, there were fewer than 130 asbestos-related claims for which the Company has liability for defense and indemnity pursuant to the indemnification obligation; however, this number tends to fluctuate up and down over time. Historically, the vast majority of the claims against both McKesson and Univar have been dismissed without payment or with a negligible payment. While the Company is unable to predict the outcome of these matters, it does not believe, based upon current available facts, that the ultimate resolution of any of these matters will have a material effect on its overall financial position, results of operations, or cash flows.

Merger-related Appraisal Litigation

In connection with the acquisition of Nexeo, on June 26, 2019, the Company reached an agreement with BCIM to resolve a dispute regarding the fair value of 5.0 million shares of Nexeo common stock, for which BCIM sought appraisal in a petition filed in the Delaware Court of Chancery, captioned BCIM Strategic Value Master Fund, LP v. Nexeo Solutions, Inc., No. 2019-0363-KSJM. The terms of the agreement, among other matters, provide that, in exchange for a release and dismissal of all asserted claims, the Company would make a cash payment of $63.5 million to BCIM and, as a result, BCIM will relinquish any and all rights to approximately $15.1 million in cash and 1.5 million shares of Univar Solutions common stock valued at $35.5 million in the custody of Equiniti, the transfer agent. With this resolution, the cash and shares were returned to the Company. During the third quarter of 2019, the Company paid the $63.5 million due to BCIM. The period during which former holders of Nexeo common stock were eligible to seek appraisal has expired, and no other such claims are pending.

Environmental

The Company is subject to various federal, state and local environmental laws and regulations that require environmental assessment or remediation efforts (collectively "environmental remediation work") and from time to time becomes aware of compliance matters regarding possible or alleged violations of these laws or regulations. For example, over the years, the Company has been identified as a "potentially responsible party" ("PRP") under the Comprehensive Environmental Response, Compensation and Liability Act and/or similar state laws that impose liability for costs relating to environmental remediation work at various sites. As a PRP, the Company may be required to pay a share of the costs of investigation and cleanup of certain sites. The Company is currently engaged in environmental remediation work at approximately 129 locations, some that are now or were previously Company-owned/occupied and some that were never Company-owned/occupied ("non-owned sites").

The Company's environmental remediation work at some sites is being conducted pursuant to governmental proceedings or investigations. At other sites, the Company, with appropriate state or federal agency oversight and approval, is conducting the environmental remediation work voluntarily. The Company is currently undergoing remediation efforts or is in the process of active review of the need for potential remediation efforts at approximately 107 current or formerly Company-owned/occupied sites. In addition, the Company may be liable as a PRP for a share of the clean-up of approximately 22 non-owned sites. These non-owned sites are typically (a) locations of independent waste disposal or recycling operations with alleged or confirmed contaminated soil and/or groundwater to which the Company may have shipped waste products or drums for re-conditioning, or (b) contaminated non-owned sites near historical sites owned or operated by the Company or its predecessors from which contamination is alleged to have arisen.

In determining the appropriate level of environmental reserves, the Company considers several factors such as information obtained from investigatory studies; changes in the scope of remediation; the interpretation, application and enforcement of laws and regulations; changes in the costs of remediation programs; the development of alternative cleanup technologies and methods; and the relative level of the Company's involvement at various sites for which the Company is allegedly associated. The level of annual expenditures for remedial, monitoring and investigatory activities will change in the future as major components of planned remediation activities are completed and the scope, timing and costs of existing activities are changed. Project lives, and therefore cash flows, range from 2 to 30 years, depending on the specific site and type of remediation project.

Although the Company believes that its reserves are adequate for environmental contingencies, it is possible, due to the uncertainties noted above; that additional reserves could be required in the future that could have a material effect on the overall financial position, results of operations, or cash flows in a particular period. This additional loss or range of losses cannot be recorded at this time, as it is not reasonably estimable.

Changes in total environmental liabilities are as follows:

(in millions)	2019	2018
Environmental liabilities at January 1	$ 83.5	$ 89.2
Revised obligation estimates	13.3	12.6
Environmental payments	(18.0)	(18.1)
Foreign exchange	(0.1)	(0.2)
Environmental liabilities at December 31	$ 78.7	$ 83.5

Environmental liabilities of $25.0 million and $32.1 million were classified as current in other accrued expenses in the consolidated balance sheets as of December 31, 2019 and 2018, respectively. The long-term portion of environmental liabilities is recorded in other long-term liabilities in the consolidated balance sheets. The total discount on environmental liabilities was $5.5 million and $5.0 million at December 31, 2019 and 2018, respectively. The discount rate used in the present value calculation was 1.9% and 2.7% as of December 31, 2019 and 2018, respectively, which represent risk-free rates.

The Company manages estimated cash flows by project. These estimates are subject to change if there are modifications to the scope of the remediation plan or if other factors, both external and internal, change the timing of the remediation activities. The Company periodically reviews the status of all existing or potential environmental liabilities and adjusts its accruals based on all available, relevant information. Based on current estimates, the expected payments for environmental remediation for the next five years and thereafter at December 31, 2019 are as follows, with projects for which timing is uncertain estimated at $11.7 million included within the 2020 estimated amount below:

(in millions)	
2020	$ 25.0
2021	11.0
2022	8.1
2023	6.8
2024	6.1
Thereafter	27.3
Total	$ 84.3

Customs and International Trade Laws

On April 3, 2019, the Company reached a settlement in a previously disclosed case with the Department of Justice (the "DOJ") regarding saccharin that allegedly transshipped from the People's Republic of China through the Republic of China and entered into commerce of the United States between 2007 and 2012. Under the settlement, the Company agreed to pay $62.5 million to fully resolve the matter, which was paid on April 8, 2019. The Company does not admit any liability and the DOJ has dismissed the complaint in its entirety.

Tax Matters

During 2017, the Brazilian Federal Supreme Court (the "Court") ruled that the inclusion of the state VAT tax collected by a taxpayer in the taxpayer's federal social contribution calculation base is unconstitutional. In 2019, the Court ruled in the Company's favor allowing the recoverability of amounts previously paid, plus interest. As a result, the Company recorded a benefit of $10.9 million in net sales, of which $9.7 million related to prior years, and $4.6 million in interest income in the consolidated statement of operations during the fourth quarter of 2019.

22. Leasing

The Company leases certain warehouses and distribution centers, office space, transportation equipment, and other machinery and equipment.

Leases

(in millions)	Balance Sheet Location	December 31, 2019
Assets		
Operating lease assets	Other assets	$ 157.3
Finance lease assets	Property, plant and equipment, net (1)	69.5
Total lease assets		$ 226.8
Liabilities		
Current liabilities:		
Current portion of operating lease liabilities	Other accrued expenses	$ 47.4
Current portion of finance lease liabilities	Current portion of long-term debt	20.9
Noncurrent liabilities:		
Operating lease liabilities	Other long-term liabilities	114.5
Finance lease liabilities	Long-term debt	50.3
Total lease liabilities		$ 233.1

(1) Finance lease right-of-use assets are recorded net of accumulated amortization of $52.1 million as of December 31, 2019.

Lease cost

	Year Ended December 31, 2019		
(in millions)	Operating Leases	Finance Leases	Total
Cost of goods sold (exclusive of depreciation)	$ 16.9	$ —	$ 16.9
Outbound freight and handling	7.8	—	7.8
Warehousing, selling and administrative	34.2	—	34.2
Depreciation	—	20.0	20.0
Interest expense	—	2.8	2.8
Total gross lease component cost	$ 58.9	$ 22.8	$ 81.7
Variable lease costs			1.1
Short-term lease costs			23.7
Total gross lease costs			$ 106.5
Sublease income			2.8
Total net lease cost			$ 103.7

Lease term and discount rate

(in millions)	December 31, 2019
Weighted-average remaining lease term (years)	
Operating leases	5.0
Finance leases	4.0
Weighted-average discount rate	
Operating leases	4.95 %
Finance leases	4.33 %

Other information

(in millions)		Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$	59.2
Operating cash flows from finance leases		2.7
Financing cash flows from finance leases		20.7

Maturity of lease liabilities

	Year Ended December 31, 2019		
(in millions)	Operating Leases	Finance Leases	Total
2020	$ 53.6	$ 22.6	$ 76.2
2021	41.4	18.9	60.3
2022	31.7	15.7	47.4
2023	21.1	6.9	28.0
2024	12.7	4.2	16.9
2025 and After	24.7	6.3	31.0
Total lease payments	$ 185.2	$ 74.6	$ 259.8
Less: interest	23.7	7.2	
Present value of lease liabilities, excluding guaranteed residual values (1)	$ 161.5	$ 67.4	
Plus: present value of guaranteed residual values (1)	0.4	3.8	
Present value of lease liabilities	$ 161.9	$ 71.2	

(1) The Company is not expected to have cash outflows related to the present value of guaranteed residual values. The Company's current present value of lease liabilities includes guaranteed residual values related to leases in effect prior to ASC 842 due to the Company's practical expedient elections denoted within "Note 2: Significant accounting policies." The gross value of the guaranteed residual values for operating and finance leases is $0.4 million and $4.1 million as of December 31, 2019, respectively.

Disclosures related to periods prior to the adoption of the New Lease Standard

The table below includes minimum rental commitments under non-cancelable operating lease in excess of one year and capital lease obligations for the year ended December 31, 2018.

	Year Ended December 31, 2018		
(in millions)	Operating Leases	Capital Leases	Total
2019	$ 54.9	$ 21.7	$ 76.6
2020	40.4	12.3	52.7
2021	30.0	9.3	39.3
2022	24.6	7.6	32.2
2023	16.3	2.8	19.1
2024 and After	30.0	1.1	31.1
Total lease payments	$ 196.2	$ 54.8	$ 251.0

23. Segments

Management monitors the operating results of its reportable segments separately for the purpose of making decisions about resource allocation and performance assessment. Management evaluates performance on the basis of Adjusted EBITDA. Adjusted EBITDA is defined as consolidated net (loss) income, plus the sum of: interest expense, net of interest income; income tax expense (benefit); depreciation; amortization; other operating expenses, net (see "Note 6: Other operating expenses, net" for more information); impairment charges; loss on extinguishment of debt; and other expense, net (see "Note 8: Other expense, net" for more information). For 2019, Adjusted EBITDA also includes an adjustment to remove the charge of the inventory fair value step-up recorded in connection with the Nexeo purchase price allocation and to remove the benefit related to a Brazil VAT recovery.

Transfer prices between reportable segments are set on an arms-length basis in a similar manner to transactions with third parties. Corporate operating expenses that directly benefit segments have been allocated to the reportable segments. Allocable operating expenses are identified through a review process by management. These costs are allocated to the reportable segments on a basis that reasonably approximates the use of services. This is typically measured on a weighted distribution of margin, asset, headcount or time spent.

Financial information for the Company's reportable segments is as follows:

(in millions)	USA	Canada	EMEA	LATAM	Other/ Eliminations [(1)]	Consolidated
	Year ended December 31, 2019					
External customers	$ 5,828.5	$ 1,217.8	$ 1,785.5	$ 455.1	$ —	$ 9,286.9
Inter-segment	100.2	6.2	3.3	—	(109.7)	—
Total net sales	$ 5,928.7	$ 1,224.0	$ 1,788.8	$ 455.1	$ (109.7)	$ 9,286.9
Adjusted EBITDA	$ 454.7	$ 100.2	$ 143.3	$ 36.1	$ (30.1)	$ 704.2
Long-lived assets [(2)]	$ 853.6	$ 197.3	$ 185.4	$ 34.7	$ 38.7	$ 1,309.7

(in millions)	USA	Canada	EMEA	LATAM	Other/ Eliminations [(1)]	Consolidated
	Year ended December 31, 2018					
External customers	$ 4,961.0	$ 1,302.3	$ 1,975.7	$ 393.5	$ —	$ 8,632.5
Inter-segment	126.6	9.3	4.0	0.2	(140.1)	—
Total net sales	$ 5,087.6	$ 1,311.6	$ 1,979.7	$ 393.7	$ (140.1)	$ 8,632.5
Adjusted EBITDA	$ 376.4	$ 104.7	$ 151.2	$ 33.3	$ (25.2)	$ 640.4
Long-lived assets [(2)]	$ 597.6	$ 141.3	$ 156.7	$ 30.2	$ 30.0	$ 955.8

(in millions)	USA	Canada	EMEA	LATAM	Other/ Eliminations [(1)]	Consolidated
	Year ended December 31, 2017					
External customers	$ 4,657.1	$ 1,371.5	$ 1,821.2	$ 403.9	$ —	$ 8,253.7
Inter-segment	121.9	9.1	4.5	0.5	(136.0)	—
Total net sales	$ 4,779.0	$ 1,380.6	$ 1,825.7	$ 404.4	$ (136.0)	$ 8,253.7
Adjusted EBITDA	$ 350.0	$ 114.1	$ 129.2	$ 28.7	$ (28.2)	$ 593.8
Long-lived assets [(2)]	$ 636.1	$ 147.7	$ 158.0	$ 33.5	$ 27.7	$ 1,003.0

(1) Other/Eliminations represents the elimination of intersegment transactions as well as unallocated corporate costs consisting of costs specifically related to parent company operations that do not directly benefit segments, either individually or collectively.

(2) Long-lived assets consist of property, plant and equipment, net and operating lease assets in 2019. Operating lease assets are excluded from 2018 and 2017 as the new leasing standard was adopted in 2019 using the modified retrospective method. Refer to "Note 2: Significant accounting policies" for more information.

The following is a reconciliation of net (loss) income to Adjusted EBITDA for the years ended December 31, 2019, 2018 and 2017, respectively:

	Year ended December 31,		
(in millions)	2019	2018	2017
Net (loss) income	$ (100.2)	$ 172.3	$ 119.8
Net income from discontinued operations	(5.4)	—	—
Depreciation	155.0	125.2	135.0
Amortization	59.7	54.3	65.4
Interest expense, net	139.5	132.4	148.0
Income tax expense	104.5	49.9	49.0
Other operating expenses, net	298.2	73.5	55.4
Other expense, net	70.5	32.7	17.4
Impairment charges	7.0	—	—
Gain on sale of business	(41.4)	—	—
Loss on extinguishment of debt	19.8	0.1	3.8
Brazil VAT recovery	(8.3)	—	—
Inventory step-up adjustment	5.3	—	—
Adjusted EBITDA	$ 704.2	$ 640.4	$ 593.8

Business line information

The Company's net sales from external customers relate to its chemical distribution business. Commodity chemicals and ingredients represent the largest portion of our business by sales and volume. Other sales to external customers primarily relate to services for collecting and arranging for the transportation of hazardous and non-hazardous waste.

Risks and Concentrations

No single customer accounted for more than 10% of net sales in any of the years presented.

The Company has portions of its labor force that are a part of collective bargaining agreements. A work stoppage or other limitation on operations could occur as a result of disputes under existing collective bargaining agreements with labor unions or government based work counsels or in connection with negotiation of new collective bargaining agreements. As of December 31, 2019, approximately 22% of the Company's labor force is covered by a collective bargaining agreement. As of December 31, 2019, approximately 3% of the Company's labor force is covered by a collective bargaining agreement that will expire within one year.

Other segment information

Information on segment assets is not disclosed as our chief operating decision maker does not evaluate reportable segments using asset information.

24. Quarterly financial information (unaudited)

The following tables contain selected unaudited statement of operations information for each quarter of the year ended December 31, 2019 and 2018. The tables include all adjustments, consisting only of normal recurring adjustments, that is necessary for fair presentation of the consolidated financial position and operating results for the quarters presented. Our business is affected by seasonality, which historically has resulted in higher sales volume during our second and third quarter.

2019	**Quarter ended**			
(in millions, except per share data)	**March 31**	**June 30**	**September 30**	**December 31** [(1)]
Net sales	$ 2,160.0	$ 2,584.6	$ 2,387.3	$ 2,155.0
Operating (loss) income	(52.3)	79.0	88.0	72.6
Net (loss) income from continuing operations	(70.0)	17.0	2.5	(55.1)
Net income (loss) from discontinued operations	6.1	(0.7)	—	—
Net (loss) income	(63.9)	16.3	2.5	(55.1)
(Loss) income per common share:				
Basic and diluted from continuing operations [(2)]	$ (0.47)	$ 0.10	$ 0.01	$ (0.33)
Basic and diluted from discontinued operations [(2)]	0.04	—	—	—
Basic and diluted (loss) income per common share [(2)]	$ (0.43)	$ 0.10	$ 0.01	$ (0.33)
Shares used in computation of (loss) income per share:				
Basic	149.2	169.8	168.6	168.6
Diluted	149.2	170.7	169.5	168.6

(1) Included in the fourth quarter of 2019 was a loss of $50.4 million relating to the annual mark to market adjustment on the defined benefit pension and postretirement plans and a gain of $41.4 million relating to the disposition of the Environmental Sciences business. Refer to “Note 11: Employee benefit plans and “Note 4: Discontinued operations and dispositions” for further information.

(2) As a result of changes in the number of shares outstanding during the year and rounding, the sum of the quarters’ earnings per share may not equal the earnings per share for any year-to-date period.

2018	**Quarter ended**			
(in millions, except per share data)	**March 31**	**June 30**	**September 30**	**December 31** [(1)]
Net sales	$ 2,158.0	$ 2,372.6	$ 2,130.7	$ 1,971.2
Operating income	107.9	117.4	99.6	62.5
Net income	65.4	56.1	49.6	1.2
Income per share:				
Basic and diluted [(2)]	$ 0.46	$ 0.40	$ 0.35	$ 0.01
Shares used in computation of income (loss) per share:				
Basic	140.9	141.1	141.2	141.4
Diluted	142.0	142.0	142.3	142.2

(1) Included in the fourth quarter of 2018 was a loss of $34.2 million relating to the annual mark to market adjustment on the defined benefit pension and postretirement plans. Refer to “Note 11: Employee benefit plans” for further information.

(2) As a result of changes in the number of shares outstanding during the year and rounding, the sum of the quarters’ earnings per share may not equal the earnings per share for any year-to-date period.

25. Subsequent events

On January 7, 2020, using the proceeds from the sale of the Environmental Sciences business, the Company repaid $174.0 million of the Term B-3 Loan due 2024.

Schedule II - Valuation and qualifying accounts

(in millions)	Balance at beginning of period	Additions: Charged to costs and other expenses	Additions: Charged to other accounts	Deductions	Balance at end of period
Year ended December 31, 2019					
Income tax valuation allowance	$ 106.3	$ 4.9	$ 0.1	$ (23.8)	$ 87.5
Year ended December 31, 2018					
Income tax valuation allowance	$ 117.2	$ 21.4	$ (1.5)	$ (30.8)	$ 106.3
Year ended December 31, 2017					
Income tax valuation allowance	$ 167.9	$ 30.6	$ 6.7	$ (88.0)	$ 117.2

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2019, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 as amended). Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission ("SEC"), and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) of the Exchange Act during the period covered by this Annual Report on Form 10-K that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the company. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use, or disposition of company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected.

In accordance with the guidance issued by the SEC, companies are permitted to exclude acquisitions from their final assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred. Our management's evaluation of internal control over financial reporting excluded the internal control activities of Nexeo Solutions, which we acquired in February 2019. Nexeo represented 32.5% of the total assets and 16.0% of the Company's net sales as of and for the year ended December 31, 2019. The Company's acquisition of Nexeo is discussed in Note 3 to its consolidated financial statements.

Management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the criteria set forth in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on the Company's assessment, management has concluded that its internal control over financial reporting was effective as of December 31, 2019 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. The Company's independent registered public accounting firm, Ernst & Young LLP, has issued an audit report on the Company's internal control over financial reporting, which appears in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1)(2) Financial Statements and Financial Statement Schedules

Reference is made to the information set forth in Part II, Item 8 of this Annual Report on Form 10-K, which information is incorporated herein by reference.

(a)(3) Exhibits

Exhibit Number	Exhibit Description
2.1	Agreement and Plan of Merger, dated September 17, 2018, by and among Nexeo, Univar, Pilates Merger Sub I Corp and Pilates Merger Sub II LLC, incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K of the Company, filed on September 18, 2018.
2.2	Purchase and Sale Agreement, by and among Nexeo Solutions, Inc., Neon Holdings, Inc. and Univar Inc., dated as of February 8, 2019, incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K of the Company filed on March 1, 2019.
2.3*	Amended and Restated Securities Purchase Agreement, dated December 30, 2019, by and among Univar Solutions Inc., Univar Solutions USA Inc., Univar Canada LTD., ENS Holdings III Corp., ENS Canada Holdings Corp. and ENS Holdings II Corp.
3.1	Third Amended and Restated Certificate of Incorporation, incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-8 of the Company, filed on June 23, 2015.
3.2	Certificate of Amendment of Certificate of Incorporation, incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company, filed on August 23, 2018.
3.3	Certificate of Amendment of the Certificate of Incorporation, incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K of the Company, filed on August 22, 2019.
3.4	Third Amended and Restated Bylaws of the Company, incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K of the Company, filed on August 22, 2019.
4.1	Form of Common Stock Certificate, incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-1 of the Company, filed on June 8, 2015.
4.2*	Description of Univar Solutions Inc. Securities registered pursuant to Section 12 of the Securities Exchange Act of 1934.
4.3	Fourth Amended and Restated Stockholders' Agreement, incorporated by reference to Exhibit 4.2 to the Form 10-K of the Company, filed on March 3, 2016.
4.4	Indenture, dated as of November 22, 2019, between Univar Solutions USA Inc., Univar Solutions Inc., the guarantors listed on the signature pages thereto and U.S. Bank National Association, incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of the Company filed on November 22, 2019.
4.5	First Supplemental Indenture, dated as of November 22, 2019, between Univar Solutions USA Inc., Univar Solutions Inc., the guarantors listed on the signature pages thereto and U.S. Bank National Association, incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of the Company filed on November 22, 2019.
4.6	Form of 5.125% Senior Notes due 2027 (included in Exhibit 4.5 hereto), incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K of the Company filed on November 22, 2019.
10.1	European ABL Facility Agreement, dated as of March 24, 2014, as amended and restated on December 19, 2018, by and among Univar B.V., the other borrowers from time to time party thereto, Univar Inc., as guarantor, JPMorgan Chase Bank, N.A., as sole lead arranger and joint bookrunner, Bank of America, N.A., as joint bookrunner and syndication agent, and J.P. Morgan Europe Limited, as administrative agent and collateral agent, incorporated by reference to Exhibit 10.1 to the Form 10-K of the Company, filed on February 21, 2019.

10.2	Credit Agreement, dated as of July 1, 2015 between Univar USA Inc., Univar Inc., the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company, filed on July 7, 2015.
10.3	First Amendment to Credit Agreement and Amended Credit Agreement, dated as of January 19, 2017 between Univar USA Inc., Univar Inc., the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company, filed on January 20, 2017.
10.4	Second Amendment to Credit Agreement, dated as of November 28, 2017 between Univar USA Inc., Univar Inc., the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company, filed November 29, 2017.
10.5*	Third Amendment, dated as of February 23, 2019, to Credit Agreement between Univar USA Inc., Univar Inc., the several banks and financial institutions from time to time party thereto and Bank of America, N.A.
10.6	Fourth Amendment and the Amended Credit Agreement, dated as of February 28, 2019 between Univar USA Inc., Univar Inc., the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of the Company, filed on March 1, 2019.
10.7	Fifth Amendment, dated November 22, 2019, among Univar Solutions USA Inc., Univar Solutions Inc., Univar Netherlands Holding B.V, the several banks and financial institutions from time to time party thereto, Goldman Sachs Bank USA and Bank of America, N.A., to the Credit Agreement dated July 1, 2015, between Univar Solutions USA Inc., Univar Solutions Inc., Univar Netherlands Holding B.V., the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company, filed on November 22, 2019.
10.8	Term Loan Guarantee and Collateral Agreement, dated as of July 1, 2015, made by Univar Inc., Univar USA Inc. and the guarantors listed on the signature pages thereto in favor of Bank of America, N.A, as collateral agent for the banks and other financial institutions that are parties to the Credit Agreement, incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of the Company, filed on July 7, 2015.
10.9*	Amendment No. 1 to Term Loan Guarantee and Collateral Agreement, dated as of November 22, 2019, made by Univar Solutions Inc., Univar Solutions USA Inc. and the guarantors listed on the signature pages thereto in favor of Bank of America, N.A, as collateral agent.
10.10	Amended and Restated ABL Credit Agreement, dated as of February 28, 2019 between Univar Inc. and certain of its subsidiaries, the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company, filed on March 1, 2019.
10.11	First Amendment dated November 22, 2019, among Univar Solutions Inc. and certain of its subsidiaries, the several banks and financial institutions from time to time party thereto and Bank of America, N.A., to the Amended and Restated ABL Credit Agreement, dated as of February 28, 2019, between Univar Solutions Inc. and certain of its subsidiaries, the several banks and financial institutions from time to time party thereto and Bank of America, N.A., incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of the Company, filed on November 22, 2019.
10.12*	Amended and Restated ABL Guarantee and Collateral Agreement, dated as of February 28, 2019, made by the Company and certain of its Domestic Subsidiaries in favor of Bank of America, N.A, as collateral agent.
10.13†	Form of Director Indemnification Agreement, incorporated by reference to Exhibit 10.56 to the Registration Statement on Form S-1 of the Company, filed on June 8, 2015.
10.14†	Form of Employee Stock Option Agreement, incorporated by reference to Exhibit 10.34 to the Registration Statement on Form S-1 of the Company, filed on August 14, 2014.
10.15†	2014 Form of Employee Stock Option Agreement, incorporated by reference to Exhibit 10.62 to the Registration Statement on Form S-1 of the Company, filed on May 26, 2015.
10.16†	Form of Employee Stock Option Agreement for awards granted between June 23, 2015 and February 1, 2017, 2015 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-8 of the Company, filed June 23, 2015.

10.17†	Form of Employee Stock Option Agreement for awards granted after February 1, 2017, 2015 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.67 to the Form 10-K of the Company filed on February 28, 2017.
10.18†	Form of Employee Stock Option Agreement for awards granted after April 13, 2017, 2015 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.1 to the Form 10-Q of the Company filed on May 5, 2017.
10.19†	Form of Employee Stock Option Agreement, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.3 to the Form 10-Q of the Company filed on May 5, 2017.
10.20†	Form of Employee Stock Option Agreement for awards granted on or after February 7, 2018, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.2 to the Form 10-Q of the Company, filed on May 10, 2018.
10.21†	Stock Option Agreement, dated as of February 7, 2018, by and between Univar Inc. and Stephen D. Newlin. 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.3 to the Form 10-Q of the Company, filed on May 10, 2018.
10.22†	Form of Employee Stock Option Agreement for awards granted on or after February 6, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.4 to the Form 10-Q of the Company, filed on May 9, 2019.
10.23*†	Form of Employee Stock Option Agreement for awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.24†	Employee Restricted Stock Unit Agreement, dated as of January 30, 2017, by and between Univar Inc. and Mr. Newlin, incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of the Company filed on January 30, 2017.
10.25†	Form of Employee Restricted Stock Unit Agreement for awards granted after February 1, 2017, 2015 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.68 to the Form 10-K of the Company filed on February 28, 2017.
10.26†	Form of Employee Restricted Stock Unit Agreement for awards granted after April 13, 2017, 2015 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.2 to the Form 10-Q of the Company filed on May 5, 2017.
10.27†	Form of Employee Restricted Stock Unit Agreement, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.4 to the Form 10-Q of the Company filed on May 5, 2017.
10.28†	Form of Employee Restricted Stock Unit Agreement for awards granted on or after February 7, 2018, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.4 to the Form 10-Q of the Company, filed on May 10, 2018.
10.29†	Restricted Stock Unit Agreement, dated as of February 7, 2018, by and between Univar Inc. and Stephen D. Newlin, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.5 to the Form 10-Q of the Company, filed on May 10, 2018.
10.30†	Form of Employee Restricted Stock Unit Agreement for awards granted on or after February 6, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.5 to the Form 10-Q of the Company, filed on May 9, 2019.
10.31*†	Form of Employee Restricted Stock Unit Agreement for awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.32*†	Univar Solutions Supplemental Savings Plan (previously named Univar USA Inc. Supplemental Valued Investment Plan), effective June 1, 2017.
10.33*†	First Amendment to the Univar Solutions Supplemental Savings Plan, dated October 9, 2018.
10.34*†	Second Amendment to the Univar Solutions Supplemental Savings Plan, dated December 30, 2019.
10.35†	Univar Canada Ltd. Supplemental Benefits Plan, dated as of June 1, 2007, incorporated by reference to Exhibit 10.28 to the Form 10-K of the Company, filed on March 3, 2016.
10.36†	Univar USA Inc. Supplemental Benefits Retirement Plan, dated as of July 1, 2004, incorporated by reference to Exhibit 10.45 to the Registration Statement on Form S-1 of the Company, filed on August 14, 2014.

10.37†	First Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of May 17, 2005, incorporated by reference to Exhibit 10.30 to the Form 10-K of the Company, filed on March 3, 2016.
10.38†	Second Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of August 24, 2006, incorporated by reference to Exhibit 10.31 to the Form 10-K of the Company, filed on March 3, 2016.
10.39†	Third Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of June 11, 2007, incorporated by reference to Exhibit 10.32 to the Form 10-K of the Company, filed on March 3, 2016.
10.40†	Fourth Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of December 6, 2007, incorporated by reference to Exhibit 10.46 to the Registration Statement on Form S-1 of the Company, filed on August 14, 2014.
10.41†	Fifth Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of December 6, 2007, incorporated by reference to Exhibit 10.34 to the Form 10-K of the Company, filed on March 3, 2016.
10.42†	Sixth Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of December 19, 2007, incorporated by reference to Exhibit 10.35 to the Form 10-K of the Company, filed on March 3, 2016.
10.43†	Seventh Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of June 19, 2008, incorporated by reference to Exhibit 10.36 to the Form 10-K of the Company, filed on March 3, 2016.
10.44†	Eighth Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of December 23, 2008, incorporated by reference to Exhibit 10.37 to the Form 10-K of the Company, filed on March 3, 2016.
10.45†	Ninth Amendment to the Univar USA Inc. Supplemental Retirement Plan, dated as of December 21, 2009, incorporated by reference to Exhibit 10.38 to the Form 10-K of the Company, filed on March 3, 2016.
10.46†	Univar Inc. 2011 Stock Incentive Plan, effective as of March 28, 2011, incorporated by reference to Exhibit 10.32 to the Registration Statement on Form S-1 of the Company, filed on August 14, 2014.
10.47†	Amendment No. 1 to the Univar Inc. 2011 Stock Incentive Plan, dated as of November 30, 2012, incorporated by reference to Exhibit 10.33 to the Registration Statement on Form S-1 of the Company, filed on August 14, 2014.
10.48†	Univar Inc. 2015 Omnibus Equity Incentive Plan is incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-8 of the Company, filed June 23, 2015.
10.49†	Univar Inc. 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.6 to the Form 10-Q of the Company filed on May 5, 2017.
10.50*†	First Amendment to Univar Inc. 2017 Omnibus Equity Incentive Plan dated as of December 6, 2019.
10.51†	Employment Agreement, effective as of January 1, 2017 by and between Univar Europe Limited and Nick Powell, incorporated by reference to Exhibit 10.65 to the Form 10-K of the Company, filed on February 28, 2018.
10.52†	Letter Agreement, by and between Nick Powell and Univar Inc., dated as of February 27, 2019 (incorporated by reference to Exhibit 5.1 to the Current Report on Form 8-K of the Company filed on March 1, 2019).
10.53†	Form of Severance and Change in Control Agreement by and Between Univar Inc. and Certain Executives, incorporated by reference to Exhibit 10.3 to the Form 10-Q of the Company, filed on November 6, 2018.
10.54†	Severance and Change of Control Agreement, dated as of January 6, 2020, between the Company and Nicholas W. Alexos, incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of the Company filed on December 16, 2019.
10.55†	Univar Inc. Employee Stock Purchase Plan is incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-8 of the Company, filed June 23, 2015.
10.56*†	First Amendment to Univar Solutions Inc. Employee Stock Purchase Plan dated as of December 6, 2019.

10.57†	Form of Employee Performance-Based Restricted Stock Unit Agreement for awards granted on or after February 7, 2018, 2017 Omnibus Equity Incentive Plan., incorporated by reference to Exhibit 10.6 to the Form 10-Q of Univar Inc., filed on May 10, 2018.
10.58†	Performance-Based Restricted Stock Unit Agreement dated as of February 7, 2018, by and between Univar Inc. and Stephen D. Newlin, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.7 to the Form 10-Q of the Company, filed on May 10, 2018.
10.59†	Form of Employee Performance Based Restricted Stock Unit Agreement for awards granted on or after February 6, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.6 to the Form 10-Q of the Company, filed on May 9, 2019.
10.60†	Form of Amended and Restated Employee Performance-Based Restricted Stock Unit Agreement for awards granted on or after February 6, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.1 to the Form 10-Q of the Company, filed on November 5, 2019.
10.61*†	Form of Employee Performance Based Restricted Stock Unit Agreement for awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.62†	Form of Director Deferred Share Unit Agreement for awards granted on or after February 7, 2018, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.8 to the Form 10-Q of the Company, filed on May 10, 2018.
10.63†	Form of Director Deferred Share Unit Agreement for awards granted on or after February 7, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.7 to the Form 10-Q of the Company, filed on May 9, 2019.
10.64*†	Form of Director Deferred Share Unit Agreement for cash retainer granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.65*†	Form of Director Deferred Share Unit Agreement for equity awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.66†	Form of Director Restricted Stock Agreement for awards granted on or after February 7, 2019, 2017 Omnibus Equity Incentive Plan, incorporated by reference to Exhibit 10.9 to the Form 10-Q of the Company, filed on May 9, 2019.
10.67*†	Form of Director Restricted Stock Agreement for awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.68*†	Form of Director Restricted Stock Unit Agreement for awards granted on or after February 21, 2020, 2017 Omnibus Equity Incentive Plan.
10.69†	Univar Inc. Omnibus Waiver regarding Whistleblower Protections, dated as of May 3, 2017, incorporated by reference to Exhibit 10.8 to the Form 10-Q of the Company filed on May 5, 2017.
14.1*	Code Handbook
21.1*	List of Subsidiaries
23.1**	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
31.1**	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2**	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1***	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2***	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document

101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

† Identifies each management compensation plan or arrangement.
* Filed as an exhibit to the Form 10-K.
** Filed herewith.
*** Furnished as an exhibit to the Form-10-K.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Univar Solutions Inc.

By: /s/ NICHOLAS W. ALEXOS

Nicholas W. Alexos, *Executive Vice President and Chief Financial Officer*

Dated May 7, 2020

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1) Registration Statement (Form S-3 No. 333-228154) of Univar Inc.,
2) Registration Statement (Form S-8 No. 333-205176) pertaining to the Univar Inc. 2015 Omnibus Equity Incentive Plan, the Univar Inc. 2011 Stock Incentive Plan, and the Univar Inc. Employee Stock Purchase Plan, and
3) Registration Statement (Form S-8 No. 333-217757) pertaining to the Univar Inc. 2017 Omnibus Equity Incentive Plan

of our reports dated February 25, 2020, with respect to the consolidated financial statements of Univar Solutions Inc. and schedule and the effectiveness of internal control over financial reporting of Univar Solutions Inc., incorporated by reference in this Amendment No. 1 on Form 10-K/A to the Annual Report (Form 10-K) for the year ended December 31, 2019.

/s/ Ernst & Young LLP
Chicago, Illinois
May 7, 2020

Exhibit 31.1

UNIVAR SOLUTIONS INC.

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,
AS ADOPTED PURSUANT TO

SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David C. Jukes, certify that:

1. I have reviewed this Annual Report on Form 10-K of Univar Solutions Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 7, 2020	By: /s/ DAVID C. JUKES
	David C. Jukes
	President and Chief Executive Officer

Exhibit 31.2

UNIVAR SOLUTIONS INC.

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) OF THE EXCHANGE ACT, AS AMENDED,
AS ADOPTED PURSUANT TO

SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Nicholas W. Alexos, certify that:

1. I have reviewed this Annual Report on Form 10-K of Univar Solutions Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 7, 2020	By: /s/ NICHOLAS W. ALEXOS
	Nicholas W. Alexos
	Executive Vice President and Chief Financial Officer