UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 11-K

(Mark One)

X ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2016

OR

o TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission file number 1-9576

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

SEVENTH AMENDED AND RESTATED OWENS-ILLINOIS, INC. LONG-TERM SAVINGS PLAN

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

OWENS-ILLINOIS, INC.

One Michael Owens Way Perrysburg, Ohio 43551-2999

Financial Statements and Supplemental Schedule

Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Years ended December 31, 2016 and 2015 with Report of Independent Registered Public Accounting Firm

Financial Statements and Supplemental Schedule

Years ended December 31, 2016 and 2015

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Report of Independent Registered Public Accounting Firm

Owens-Illinois, Inc. Employee Benefit Committee Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

We have audited the accompanying statements of net assets available for benefits of the Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan as of December 31, 2016 and 2015, and the related statements of changes in net assets available for benefits for the years ended December 31, 2016 and 2015. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan at December 31, 2016 and 2015, and the changes in its net assets available for the years ended December 31, 2016 and 2015, in conformity with U.S. generally accepted accounting principles.

The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2016 has been subjected to audit procedures performed in conjunction with the audit of Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan's financial statements. The information in the supplemental schedule is the responsibility of the Plan's management. Our audit procedures included determining whether the information reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental schedule. In forming our opinion on the information, we evaluated whether such information, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ Ernst & Young LLP

Toledo, Ohio

June 7, 2017

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Sixth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Statements of Net Assets Available for Benefits

| | December 31, | | |
|--------------------------------------|-------------------|----|-------------|
| | 2016 | | 2015 |
| | | | |
| Assets: | | | |
| | | | |
| Interest in investments of the Trust | \$ 221,846,551 | \$ | 223,541,277 |
| | | | |
| Notes receivable from participants | 12,567,112 | | 13,293,966 |
| | | - | |
| Net assets available for benefits | \$ 234,413,663 | \$ | 236,835,243 |
| | | | |

 ${\it The\ accompanying\ notes\ are\ an\ integral\ part\ of\ the\ financial\ statements}.$

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Statements of Changes in Net Assets Available for Benefits

| | Year ended I | Decemb | er 31, |
|---|-----------------|---------------|--------------|
| | 2016 | | 2015 |
| | | | |
| Interest in investment gain (loss) of the Trust | \$ 9,450,796 | \$ | (11,118,478) |

| Contributions: | | |
|---|----------------|----------------|
| Participant | 14,005,028 | 13,637,277 |
| Employer | 3,451,157 | 3,019,918 |
| | | |
| Interest income due to notes receivable from participants | 505,608 | 519,565 |
| Participant withdrawals | (28,797,853) | (27,593,734) |
| Plan to plan transfers | (908,302) | (867,189) |
| Administration fees | (129,589) | (136,324) |
| Other | 1,575 | 45,903 |
| | | |
| Decrease in net assets available for benefits | (2,421,580) | (22,493,062) |
| | | |
| Net assets available for benefits at beginning of year | 236,835,243 | 259,328,305 |
| | | |
| Net assets available for benefits at end of year | \$ 234,413,663 | \$ 236,835,243 |

The accompanying notes are an integral part of the financial statements.

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

> Notes to Financial Statements December 31, 2016

1. Plan Description

The Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan (the "Plan") was adopted by Owens-Illinois, Inc. (the "Company") for the benefit of eligible U.S. hourly employees of the Company and certain of its subsidiaries and affiliates.

The Plan's investments are held in the Owens-Illinois, Inc. Master Savings Trust (the "Trust") administered by the Owens-Illinois, Inc. Employee Benefits Committee (the "Committee"). The Plan's Trustee is John Hancock (the "Trustee") and recordkeeping is managed by John Hancock (the "Recordkeeper"), along with the assets of another defined contribution plan of the Company.

The Plan is a defined contribution plan which provides eligible employees, upon completion of a probationary period, the opportunity to make pretax and/or after-tax contributions, in specific percentages, within guidelines established by the Company. Participant contributions are immediately fully vested and may be divided at the participant's discretion among the various investment options from 1% to 100%, with no limit on the number of options selected. A participant may elect to change the percentage of compensation to be contributed each pay period; any such changes shall be effective on the next pay period.

Each participant's account is credited with the participant's contributions and the Company's matching contributions and allocations of plan earnings, and is charged with an allocation of administrative expenses. Plan earnings are allocated based on the participant's share of net earnings or losses of their respective elected investment options. Allocations of plan administrative expenses are based on the participant's account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account. In 2016, the Plan was amended to reflect certain changes in employer contribution percentages.

Effective January 1, 2016 for certain participants, the Company contributed to the Plan an amount not to exceed 5% of the participant's pretax contributions. For participants at a certain Company facility, the Company contributes to the Plan an amount not to exceed 4% of the participant's pretax contributions. For participants at certain Company facilities, the Company contributes an additional Employer Base Contribution to the Plan 3% of the participant's compensation. For participants at a certain Company facility, the Company contributes to the Plan amounts based on a stipulated rate per hour. All Company contributions are specified by various labor contracts and are immediately fully vested. All Company contributions, with the exception of contributions for participants at a certain facility, are invested in the Owens-Illinois Company stock fund. Company contributions not invested in the Owens-Illinois Company stock fund are invested in accordance with the participant's current choice of investment options. Participants are allowed to transfer Company matching contributions from the Company stock fund at any time. All contributions are subject to certain limitations of the Internal Revenue Code (the "Code").

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

Prior to the 2016 plan amendment, the Company contributed to the Plan an amount equal to twenty-five percent (25%) of the first eight percent (8%) of the participant's pretax contributions. For participants at a certain Company facility, the Company contributed to the Plan an amount equal to fifty percent (50%) of the first eight percent (8%) of the participant's pretax contributions. For participants at certain Company facilities, the Company contributed an additional Employer Base Contribution to the Plan of two percent (2%) of the participant's compensation.

The Plan invests in common stock of the Company through its Company Stock Fund. The Company Stock Fund may also hold cash or other short-term securities, although these are expected to be a small percentage of the fund. The Company has implemented a dividend pass through election for its participants.

Each participant is entitled to exercise voting rights attributable to the shares allocated to their account and is notified by the Company prior to the time that such rights may be exercised. The trustee is not permitted to vote any allocated shares for which instructions have not been given by a participant. The Trustee votes any unallocated shares in the same proportion as those shares that were allocated, unless the Committee directs the trustee otherwise. Participants have the same voting rights in the event of a tender or exchange offer.

Within certain limitations, a participant may also transfer into the Plan a rollover contribution or other assets from another qualified plan.

With certain exceptions, participants may transfer existing fund balances among the various investment funds daily. Transfers into the Company stock fund will not be permitted until 90 days after the last transfer out. There are no restrictions on the frequency of transfers out of the Company stock fund.

Upon separation from service with the Company due to death, disability, retirement or termination, a participant may elect to receive either a lump sum or may elect installment payments on a monthly basis. The benefit to which a participant is entitled is the benefit that can be provided from the vested value of the participant's account. In-service withdrawals are available in certain limited circumstances, as defined by the Plan. Hardship withdrawals are allowed for participants incurring an immediate and heavy financial need, as defined by the Plan. Hardship withdrawals are strictly regulated by the Internal Revenue Service ("IRS") and a participant must exhaust all available loan options and available distributions prior to requesting a hardship withdrawal.

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended, ("ERISA") and applicable collective bargaining agreements.

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

The above information is intended as a general description of the Plan's operating guidelines. Reference should be made to the Plan document for more specific provisions.

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared on the accrual basis of accounting.

Payment of Benefits

Benefits are recorded when paid.

Notes Receivable from Participants

Notes receivable from participants are loans of a portion of the participants' existing account balance that the Plan permits participants to borrow. Loans are made subject to certain conditions and limitations specified in the Plan and are repaid in weekly installments, including interest. The Plan allows active participants to only have three loans (only one of which can be used to purchase the participant's primary residence) outstanding at any time. The minimum amount allowed by the Plan for a loan is \$500 and the maximum loan amount available to a participant is determined by their account balance. The Plan allows a participant to borrow up to the lesser of (i) 50% of their account balance or (ii) \$50,000. The maximum term of loans is five years, with the exception of home loans for the purchase of a primary residence, for which the maximum term is ten years. Participants' loans are collateralized by their account balances. The rate at which loans bear interest is established at the inception of the borrowing, based on the prime rate then being charged by the Trustee plus 1%. Repayments of loans, including the interest portion thereof, are reinvested on the participants' behalf in accordance with their current choice of investment options. Participants are charged a transaction fee for each new loan initiated. The amount of the fee is \$50 for a nonresidential loan and \$100 for a residential loan. The fee is deducted from the participant's account when the loan is processed. Notes receivable from participants are valued at their unpaid principal balances plus accrued interest. Interest income on notes receivable from participants is recorded when earned.

Basis of Presentation and Plan Investments

The accompanying financial statements reflect the Plan's total interest in the net assets and transactions of the Trust as allocated by the Recordkeeper and any such other investments and transactions related solely to the Plan. Net assets, as well as earnings and losses, of the Trust are allocated to the Plan based on the sum of the individual accounts of the Plan's participants. The Trust also invests in the common stock of the Company. These transactions qualify as party-in-interest transactions; however, they are exempt from the prohibited transaction rules under ERISA.

Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

The following table presents the fair value of investments of the Trust:

| | December 31, | | |
|--|-------------------|----|-------------|
| | 2016 | | 2015 |
| Investments, at fair value: | | | |
| Mutual fund investments | \$ 375,558,739 | \$ | 377,003,424 |
| Pooled separate account | 86,119,507 | | 88,041,007 |
| Common stock | 61,970,952 | | 49,050,920 |
| Total investments | \$ 523,649,198 | \$ | 514,095,351 |
| Plan's interest in investments of the Trust | \$ 221,846,551 | \$ | 223,541,277 |
| | 0.4 | | 2.1 |
| Plan's interest as a percentage of the Trust | 42% | | 43% |

The investment income (loss) of the Trust are as follows:

| | Year Ended December 31, | | | |
|--|-------------------------|----|--------------|--|
| | 2016 | | 2015 | |
| | | | | |
| Interest and dividends | \$ 7,409,409 | \$ | 8,519,473 | |
| Net appreciation (depreciation) in fair value of investments | 17,607,704 | | (28,308,837) | |
| Total income (loss) | \$ 25,017,113 | \$ | (19,789,364) | |
| | | | | |
| Plan's interest in investment income (loss) of the Trust | \$ 9,450,796 | \$ | (11,118,478) | |

Investment Valuation and Income Recognition

Investments held by the Trust are stated at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). See Note 3 for further discussion and disclosures related to fair value measurements.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded as earned. Dividends are recorded on the ex-dividend date. Net appreciation includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Tax Status

The Plan has received a determination letter from the IRS dated October 16, 2014, stating that the Plan is qualified under Section 401(a) of the Code and therefore the related trust is tax-exempt. Once qualified, the Plan is required to operate in conformity with the Code to maintain

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

its qualified status. The plan administrator has indicated that it will take the necessary steps, if any, to bring the Plan's operations into compliance with the Code.

Accounting principles generally accepted in the United States require plan management to evaluate uncertain tax positions taken by the Plan. The financial statement effects of a tax position are recognized when the position is more likely than not, based on the technical merits, to be sustained upon examination by the IRS. The plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2016, there are no uncertain positions taken or expected to be taken. The Plan has recognized no interest or penalties related to uncertain tax positions. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

Plan Expenses

Certain Plan expenses are paid by either the Plan or the Company, as provided by the Plan's provisions.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes and supplemental schedule. Actual results could differ from those estimates and assumptions.

Risk and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

New Accounting Standards

In August 2014, the Financial Accounting Standards Board issued ASU No. 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (ASU 2014-15)." ASU 2014-15 defines management's responsibility to evaluate whether there is a substantial doubt about an organization's ability to continue as a going concern and to provide related footnote disclosures. In connection with preparing financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about an organization's ability to continue as a going concern within one year after the date that the financial statements are issued. ASU 2014-15 is effective for fiscal years ending after December 15, 2016. Management has performed this assessment as of the date these financial statements were issued and no going concern uncertainties were identified.

In February 2017, the FASB issued Accounting Standards Update 2017-06, *Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): Employee Benefit Plan Master Trust Reporting,* (ASU 2017-06). ASU 2017-06 requires a plan to present its interest in a master trust and the change in that interest as separate line items in the statement of net assets available for benefits and in the statement of changes in net assets available for benefits, respectively. It also requires a plan to disclose the master trust's investments and other assets and liabilities, as well as the dollar amount of its interest in these balances. ASU 2017-06 eliminates the requirement for a health and welfare plan to provide investment disclosures for 401(h) account assets. ASU 2017-06 is effective for entities for fiscal years beginning after December 15, 2018, with retrospective application to all periods presented. Early application is permitted. The Company has not yet assessed the impact of this standard on the financial statements.

3. Fair Value Measurements

Generally accepted accounting principles ("GAAP") define fair value as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability (exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. GAAP establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable inputs such as quoted prices in active markets;
- Level 2: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3: Unobservable inputs for which there is little or no market data, which requires the Company to develop assumptions.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

The following is a description of the valuation techniques and inputs used for each general type of assets measured at fair value:

Common stock: Consists of the Company's stock valued using quoted market prices on the last business day of the year.

Mutual Funds: The shares of mutual funds are valued at quoted market prices which represent the net asset value ("NAV") of shares held by the Plan at year-end

Pooled separate account: The pooled separate account invests in fully benefit-responsive investment contracts and is designed to deliver safety and stability by preserving principal and accumulating earnings. Participant-directed redemptions have no restrictions; however, the Trust is required to provide a 30-day notice to liquidate its entire share in the fund with final payment taking up to one year. The pooled separate account is valued at the NAV provided by the administrator of the fund.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Trust believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the Trust's investments at fair value:

| | December 31, 2016 | | | | | | | |
|---|-------------------|-------------|----|------------|----|---------|----|-------------|
| | | Level 1 | | Level 2 | | Level 3 | | Total |
| Common stock | \$ | 61,970,952 | \$ | _ | \$ | _ | \$ | 61,970,952 |
| Mutual funds | | 298,853,745 | | 76,704,994 | | | | 375,558,739 |
| Total assets at fair value | \$ | 360,824,697 | \$ | 76,704,994 | \$ | | | 437,529,691 |
| | | | | | | | | |
| Pooled separate account investments measured at | | | | | | | | |
| net asset value | | | | | | | | 86,119,507 |
| Balance at December 31, 2016 | | | | | | | \$ | 523,649,198 |

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

| | December 31, 2015 | | | | | | |
|----------------------------|-----------------------|----|------------|----|---------|----|-------------|
| | Level 1 | | Level 2 | | Level 3 | | Total |
| Common stock | \$ 49,050,920 | \$ | | \$ | | \$ | 49,050,920 |
| Mutual funds | 293,252,034 | | 83,751,390 | | | | 377,003,424 |
| Total assets at fair value | \$ 342,302,954 | \$ | 83,751,390 | \$ | | | 426,054,344 |

| Pooled separate account investments measured at | |
|---|-------------------|
| net asset value | 88,041,007 |
| Balance at December 31, 2015 | \$ 514,095,351 |

(1) In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statement of net assets available for benefits.

No transfers between levels occurred during 2016 or 2015.

4. Differences Between Financial Statements and Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

| | Year Ended I | Decemb | er 31, |
|--|-------------------|--------|-------------|
| | 2016 | | 2015 |
| Net assets available for benefits per the financial statements | \$ 234,413,663 | \$ | 236,835,243 |
| Deduct: Defaulted loans | (891,348) | | (1,118,728) |
| Net assets available for benefits per the Form 5500 | \$ 233,522,315 | \$ | 235,716,515 |

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Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Notes to Financial Statements — Continued December 31, 2016

The following is a decrease in net assets to the amount per the Form 5500 for the year ended December 31, 2016:

| Decrease in net assets per the Financial Statements | \$ (2,421,580) |
|---|-------------------|
| Defaulted loans in prior year | 1,118,728 |
| Defaulted loans in current year | (891,348) |
| Net decrease per the Form 5500 | \$ (2,194,200) |

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Employer Identification No. 22-2781933 Plan No. 003

Schedule H, Line 4i-Schedule of Assets (Held at End of Year)

December 31, 2016

| | Description | Principal Amount | Fair Value | <u> </u> | | | | |
|--|-------------------------------------|--|---|-------------|----|--|--|--|
| | *Notes receivable from participants | Interest rates rangi various maturity | ng from 4.25% to 9.25%, dates | \$ 12,567,1 | 12 | | | |
| | *Party-in-interest | | | | | | | |
| | | 14 | | | | | | |
| Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan SIGNATURES The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Owens-Illinois, Inc. Employee Benefits Committee, which administers the employee benefit plans, has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized. | | | | | | | | |
| Dated: June 7, 20 | 17 | By: | Owens-Illinois, Inc. Employee Benefits Commi | ttee | | | | |
| | | Ву: | /s/ Etta Strong Etta Strong Chairman | | | | | |
| | | 15 | | | | | | |

Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 033-57139, 333-67377, 333-69624 and 333-170220) pertaining to the Seventh Amended and Restated Owens-Illinois, Inc. Long Term Savings Plan of our report dated June 7, 2017, with respect to the financial statements and schedule of the Seventh Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2016.

/s/ Ernst & Young LLP

Toledo, Ohio June 7, 2017