

# DOWLEX™ 2517

# The Dow Chemical Company - Polyethylene Resin

Thursday, December 21, 2023

## **General Information**

### **Product Description**

DOWLEX<sup>TM</sup> 2517 Polyethylene Resin is a narrow molecular weight distribution copolymer designed to offer good ESCR and low temperature properties with excellent flexibility. This resin has good processability over a wide range of molding conditions.

- · Linear Low Density Polyethylene
- · For lids, housewares and containers
- · Excellent low temperature flexibility, good ESCR

#### Complies with:

- U.S. FDA FCN 424
- · Canadian HPFB No Objection (With Limitations)
- EU, No 10/2011
- U.S. FDA-DMF
- U.S. USP 23
  - · Consult the regulations for complete details.

·	<u>'</u>		
General			
Material Status	Commercial: Active		
Regional Availability	Asia Pacific	North America	
Additive	Antiblock: No	Processing Aid: No	Slip: No
Agency Ratings	• DMF	• FDA FCN 424	. • USP 23
	• EU No 10/2011	HPFB (Canada) No Objection <sup>1</sup> USF 23	
Forms	<ul> <li>Pellets</li> </ul>		
Processing Method	Injection Molding		

ASTM & ISO Properties <sup>2</sup>						
Physical	Typical Value (English)	Typical Value (SI)	Test Method			
Density / Specific Gravity	0.919	0.919	ASTM D792			
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25 g/10 min	25 g/10 min	ASTM D1238			
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693			
122°F (50°C), 100% Igepal, F50	4.00 hr	4.00 hr				

Copyright ©, 2023, Formerra, LLC. All the information in this literature is for general information purpose only. Formerra makes no representations, guarantees, or warranties of any kind with respect to the information contained in this literature, including its accuracy, completeness, reliability, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for pricing, property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Formerra makes no warranties or guarantees respecting suitability of either Formerra's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. FORMERRA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature or any other provided literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner. Any action you take upon the information you find in this literature is strictly at your own risk. Formerra will not be liable for any losses and/or damages in connection with the use of this literature. By using this literature, you hereby consent to this disclaimer and agree to its terms.

## DOWLEX™ 2517

# The Dow Chemical Company - Polyethylene Resin

Mechanical	Typical Value	(English)	Typical Value	(SI)	Test Method
Tensile Strength					ASTM D638
Yield	1400	psi	9.65	MPa	
Break	1300	psi	8.96	MPa	
Tensile Elongation					ASTM D638
Yield	3.0	%	3.0	%	
Break	600	%	600	%	
Flexural Modulus - 2% Secant	34000	psi	234	MPa	ASTM D790B
Impact	Typical Value	(English)	Typical Value	(SI)	Test Method
Tensile Impact Strength <sup>3</sup>	190	ft·lb/in²	399	kJ/m²	ASTM D1822
Hardness	Typical Value	(English)	Typical Value	(SI)	Test Method
Durometer Hardness (Shore D)	45		45		ASTM D2240
Thermal	Typical Value	(English)	Typical Value	(SI)	Test Method
Deflection Temperature Under Load					ASTM D648
66 psi (0.45 MPa), Unannealed	103	°F	39.4	°C	
Brittleness Temperature	< -105	°F	< -76.1	°C	ASTM D746
Vicat Softening Temperature	197	°F	91.7	°C	ASTM D1525
Melting Temperature (DSC)	255	°F	124	°C	Internal Method
Peak Crystallization Temperature (DSC)	218	°F	103	°C	Internal Method

Plaque molded and tested in accordance with ASTM D4976.

### **Notes**

<sup>1</sup> With limitations

Copyright ©, 2023, Formerra, LLC. All the information in this literature is for general information purpose only. Formerra makes no representations, guarantees, or warranties of any kind with respect to the information contained in this literature, including its accuracy, completeness, reliability, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for pricing, property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Formerra makes no warranties or guarantees respecting suitability of either Formerra's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. FORMERRA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature or any other provided literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner. Any action you take upon the information you find in this literature is strictly at your own risk. Formerra will not be liable for any losses and/or damages in connection with the use of this literature. By using this literature, you hereby consent to this disclaimer and agree to its terms.

<sup>&</sup>lt;sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>&</sup>lt;sup>3</sup> Type S