



Technical Data Sheet

DOWLEX™ 2388 Polyethylene Resin

Description

DOWLEX™ 2388 Polyethylene Resin is an ethylene/octene-1 copolymer, produced in the proprietary solution process of The Dow Chemical Company. It has a unique molecular structure with a controlled side chain distribution, which provides excellent stress crack resistance properties combined with very good long term hydrostatic strength.

Processability: DOWLEX™ 2388 Polyethylene Resin is easy to process on traditional PE processing equipment. Typical extrusion temperatures for processing range from 190 to 230°C. For further information see our Extrusion Guideline.

Applications

Pipes for hot and cold water systems, e.g.:

- Heating/cooling applications
- Radiator connections
- Warm / cold drinking water distributions
- Mono- and multi-layer pipe
- Industrial applications

Main Characteristics

- Suitable for elevated temperatures without crosslinking
- Outstanding taste and odor performance
- Excellent processability

Complies with

- European Commission Regulation (EU), No 10/2011
- U.S. FDA 21 CFR 177.1520(c)3.2a (with Restrictions)
- NSF International
- NSF/ANSI Standard 14
- NSF/ANS/CAN Standard 61
- ASTM D3350 cell classification PE 227375

Consult the regulations for complete details.

Additive

- Antiblock: No
- Processing aid: No
- Slip: No

Properties¹

Physical	Nominal Value	Unit	Test Method ²
Density	0.941	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	0.55	g/10 min	
190°C/5.0 kg	1.9	g/10 min	
Mechanical			
Tensile Modulus, 0.0787 in (2.00 mm), Compression Molded	645	MPa	ISO 527-1
Tensile Stress			ISO 527-2/50
Yield, 0.0787 in (2.00 mm), Compression Molded	20.3	MPa	
Break, 0.0787 in (2.00 mm), Compression Molded	37.0	MPa	
Tensile Strain			ISO 527-2/50
Yield, 0.0787 in (2.00 mm), Compression Molded	14	%	
Break, 0.0787 in (2.00 mm), Compression Molded	780	%	
Flexural Modulus 0.0787 in (2.00 mm), Compression Molded	660	MPa	ISO 178
Impact			
Notched Izod Impact Strength	23	kJ/m ²	ISO 180
Hardness			
Shore Hardness			ISO 868
Shore D, 0.0787 in (2.00 mm), Compression Molded	61		
Thermal			
Vicat Softening Temperature	125	°C	ASTM D1525
CLTE – Flow (68 to 158°F (20 to 70°C))	1.8E-4	cm/cm/°C	DIN 53752
Thermal Conductivity (140°F (60°C))	0.40	W/m/K	DIN 52612

1. Typical properties: these are not to be construed as specifications.
2. ISO: International Standardization Organization
ASTM: American Society for Testing and Materials
DIN: Deutsche Industrie Norm

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