

K38-20-138 Polyethylene Copolymer

K38-20-138 is a natural medium density polyethylene resin designed for pipe extrusion and small diameter tubing applications. It exhibits excellent long term stress life and environmental stress crack resistance. When the product is extruded in combination with a Innovene Polyethylene approved black masterbatch, the resulting pressure rated formulation known as Fortiflex K38-20-123 has NSF Standard 14 certification, complies with ANSI/NSF Standard 61 health effects requirements and is listed with the Plastic Pipe Institute as PE2406.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Density (Natural)	—	0.940 g/cc	D 4883
Melt Index ²	—	0.20 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	2800 psi	19.3 MPa	D 638
@ Break (2 in/min)	4500 psi	31.0 MPa	D 638
Elongation			
@ Break (2 in/min)	>800%	>800%	D 638
Flexural Modulus ³	100,000 psi	690 MPa	D 790
Notched Izod Impact Strength	10 ft-lbf/in	0.53 kJ/m	D 256
Hardness (Shore D)	64	64	D 2240
Vicat Softening Point	248 °F	120 °C	D 1525
Brittleness Temperature	<-180 °F	<-118 °C	D 746
Environmental Stress			
Crack Resistance ⁴	>5000 hrs.	>5000 hrs.	D 1693
Environmental Stress			
Crack Resistance ⁵	>5000 hrs.	>5000 hrs.	D 1693
Pipe Ring ESCR ⁶	>5000 hrs.	>5000 hrs.	F 1248
Notch Tensile (PENT)	>100 hrs	>100 hrs	F 1473
Cell Classification	234360A	234360A	D 3350

¹ Typical properties will vary within specification limits.

² 190° C/2160 g

³ 2% Secant-Method 1

⁴ Condition B, 10%

⁵ Condition C

⁶ One inch, SIDR 7

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Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an e-mail to: OPMSDS@innovene.com.

Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The available product health and safety information for this material is contained in the Material Safety Data Sheet (MSDS) that may be obtained by calling + 1-800-527-5419 (Toll Free - North America), or by sending an e-mail to: OPMSDS@innovene.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by Innovene is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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