



NOVAPOL® TR-0338-UI(UIG)

NOVA Chemicals - Medium Density Polyethylene

Tuesday, November 5, 2019

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Antioxidant • UV Stabilizer
Features	• Antioxidant • Food Contact Acceptable • General Purpose • Good Processability • Good Stiffness • High ESCR (Stress Crack Resist.) • Low Density • Low Temperature Impact Resistance • UV Stabilized
Uses	• Agricultural Tanks • Containers • General Purpose • Septic Tanks
Agency Ratings	• FDA 21 CFR 176.170(c), Table 2, Cond. D • FDA 21 CFR 176.170(c), Table 2, Cond. E • FDA 21 CFR 176.170(c), Table 2, Cond. F • FDA 21 CFR 176.170(c), Table 2, Cond. G • FDA 21 CFR 177.1520(c) 3.2a • NSF STD-51 • NSF STD-61 • NSF STD-24
Forms	• Pellets
Processing Method	• Rotational Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.938	g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	3.5	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
122°F, 100% Igepal, Compression Molded, F50	> 1000	hr	ASTM D1693A
122°F, 100% Igepal, Compression Molded, F50	> 1000	hr	ASTM D1693B
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ²			ASTM D638
Yield, 0.0748 in, Compression Molded	2810	psi	
Tensile Elongation ²			ASTM D638
Yield, 0.0748 in, Compression Molded	11	%	
Flexural Modulus - 1% Secant (Compression Molded)	110000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
ARM Impact - Rotational Molded			ARM
-40°F, 0.13 in	51.6	ft-lb	
-40°F, 0.25 in	162	ft-lb	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	140	°F	ASTM D648
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	109	°F	
Peak Melting Temperature	257	°F	ASTM E794

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type IV, 2.0 in/min