



SURPASS® RMs341-U(UG)

NOVA Chemicals - High Density Polyethylene

Tuesday, November 5, 2019

General Information

General

Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Antioxidant	• UV Stabilizer	
Features	• Antioxidant • Fast Molding Cycle • Good Mold Release	• Good Processability • High Density • Low Temperature Impact Resistance	• Low Viscosity • Octene Comonomer • UV Stabilized
Uses	• Containers • Septic Tanks	• Sporting Goods • Tanks	
Agency Ratings	• FDA 21 CFR 176.170(c), Table 2 ¹ • FDA 21 CFR 177.1520(c) 3.2a ²	• NSF STD-24 • NSF STD-51	• NSF STD-61
Processing Method	• Rotational Molding		

ASTM & ISO Properties³

Physical	Nominal Value	Unit	Test Method
Density	0.941	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 ⁴			ASTM D638
Yield, 0.0748 in, Compression Molded	2930	psi	
Tensile Elongation ⁴			ASTM D638
Yield, 0.0748 in, Compression Molded	12	%	
Flexural Modulus - 1% Secant (Compression Molded)	120000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
ARM Impact - Rotational Molded			ARM
-40°F, 0.12 in	70.1	ft·lb	
-40°F, 0.25 in	170	ft·lb	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi, Unannealed, Compression Molded	144	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, Compression Molded	109	°F	
Melting Temperature	259	°F	DSC
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94

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Notes

¹ Conditions of use B-H.

² RMs341-U and RMs341-UG are subject to the specific limitation that they may contact food only at temperatures of 212°F and below.

³ Typical properties: these are not to be construed as specifications.

⁴ Type IV, 2.0 in/min