

Technical Data Sheet

Icorene 3940-3452G TSI Black

Polyethylene, Linear Medium Density

Product Description

Icorene 3940 is a linear medium density polyethylene developed for rotational molding applications. The resin is fully UV stabilized and suitable for general purpose applications. It has a good balance of properties such as toughness and stiffness.

Processing Method	Rotomolding
Attribute	Ablation Resistant; Good Processability; Good Stiffness; Good Toughness; UV Resistant
Forms	Pellets; Powder
Appearance	Black; Colors Available; Natural Color
Additive	UV Stabilizer
Application	Containers; General Purpose; Outdoor Applications; Pallets; Tanks

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	3.4 to 4.0	g/10 min	ASTM D1238
Density	0.939 to 0.941	g/cm ³	ASTM D1505
Mechanical			
Tensile Strength at Yield, (50 mm/min)	20.0	MPa	ASTM D638
Environmental Stress Crack Resistance			
(10% Igepal)	50.0	hr	ASTM D1693
(100% Igepal)	>1000	hr	ASTM D1693
Flexural Modulus, (1.3 mm/min)	834	MPa	ASTM D790
Impact			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	77	J	ARM
(-40 °C, 6.35 mm, Rotational Molded)	>258	J	ARM
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	40.6	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	62	°C	ASTM D648