

MEDIUM DENSITY POLYETHYLENE RESIN

MD 5040RP-BK

BLACK | Pellets

ROTATIONAL MOLDING

INJECTION MOLDING

HEAT STABILIZED

DENSITY

0.935-0.942 g/cm³

ASTM D792

MELT INDEX

3.5-6.0 g/10 min

190°C / 2.16 kg · ASTM D1238

ESCR

> 982 hr

122°F, 10% Igepal, F50 · ASTM D1693

IMPACT

59 ft-lb

-40°F, 0.125 in, rotational molded · ARM

01 PRODUCT DESCRIPTION

FIN-X MD 5040RP-BK is a black medium density polyethylene (MDPE) resin supplied in pellet form. It is intended for rotational and injection molding applications requiring excellent processability and aesthetics, low warpage, good impact strength and stress-crack resistance. The resin is heat and UV stabilized for broad processing latitude, good color retention and long service life.

APPLICATIONS

Intermediate bulk containers

Toys

Agricultural and water storage tanks

Marine parts

General-purpose custom molding

02 GENERAL

FORM	Pellets
COLOR	Black
PROCESSING METHODS	Rotational molding Injection molding
STABILIZATION	Heat stabilized Long-term UV stabilization (UV-8 package)
ADDITIVES	Antiblock: No Slip: No Processing Aid: Yes UV Stabilizer: UV-8

03 TECHNICAL PROPERTIES - ENGLISH VALUES

SECTION	PROPERTY / CONDITION	TEST METHOD	NOMINAL VALUE (ENGLISH)
PHYSICAL	Density	ASTM D792	0.935-0.942 g/cm ³
	Melt Index (190°C / 2.16 kg)	ASTM D1238	3.5-6.0 g/10 min
	ESCR, 122°F, 10% Igepal, F50	ASTM D1693	> 982 hr
	ESCR, 122°F, 100% Igepal, F50	ASTM D1693	> 1,000 hr
MECHANICAL	Tensile Strength at Yield	ASTM D638	2,720 psi
	Flexural Modulus, 1% Secant	ASTM D790B	95,000 psi
IMPACT	Impact Strength, -40°F, 0.125 in, rotational molded	ARM	59 ft-lb
	Impact Strength, -40°F, 0.250 in, rotational molded	ARM	188 ft-lb
THERMAL	Deflection Temperature Under Load, 66 psi, unannealed	ASTM D648	125°F
	Deflection Temperature Under Load, 264 psi, unannealed	ASTM D648	95°F
	Melting Temperature (DSC)	Source method	257°F

DATA NOTICE

Typical values are based on the supplied reference data and are not to be construed as minimum or maximum specifications, except for the stated Melt Index and Density ranges. Users must confirm suitability and performance through their own processing and laboratory evaluations.