Marlex® HMN TR-945G

High Density Polyethylene

Chevron Phillips Chemical Company LLC

Message:

These hexene copolymers are tailored for rotational molding applications that require:
Wide process windows
Good impact strength
Good flow combined with fair ESCR
High modulus
Typical applications for HMN TR-945 and HMN TR-945G include items such as:
Large tanks and other high modulus parts
Ductwork
These resins are available in:
Pellet form - HMN TR-945
35 US mesh powder - HMN TR-945G
These resins meet these specifications:
ASTM D4976 - PE 233
FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per 21 CFR 176.170(c) Table 2. Single use articles contacting food types I, II, IV-B, VI-A, VI-B, VII-B, and VIII. Repeated use articles contacting all food types defined in 21 CFR 176.170(c) Table 1.
FMVSS.302 burn test
Long term UV stabilization - ASTM 2565 (Cycle 1): Greater than UV-16

General Information			
Additive	UV stabilizer		
Features	Rigidity, high High ESCR (Stress Cracking Resistance) hexene comonomer Impact resistance, good Good UV resistance Good liquidity		
Uses	Water tank		
Agency Ratings	ASTM D 2565 ASTM D 4976-PE233 FDA 21 CFR 177.1520(c) 3.2a 2		
Forms	Powder		
Processing Method	rotomolding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.945	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			ASTM D1693A
10% Igepal, molded, F50	25.0	hr	ASTM D1693A
100% Igepal, molded, F50	70.0	hr	ASTM D1693A
Hardness	**Nominal Value**	**Unit**	**Test Method**

Durometer Hardness (Shore D, Compression Molded)	63		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [1] (Yield, 3.17 mm, Rotational Molded)	20.0	MPa	ASTM D638
Tensile Elongation [2] (Break, 3.17 mm, Rotational Molded)	460	%	ASTM D638
Flexural Modulus [3]			ASTM D790
2% positive cut: mm, rotational molding	740	MPa	ASTM D790
Tangent: mm, rotational molding	910	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
ARM Impact			
-40°C, 3.20 mm	92.0	J	
-40°C, 6.35 mm	223	J	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 3.17mm, rotational molding	64.0	°C	ASTM D648
1.8 MPa, unannealed, 3.17mm, rotational molding	44.0	°C	ASTM D648
Brittleness Temperature	-75.0	°C	ASTM D746A
Vicat Softening Temperature	118	°C	ASTM D1525 [4]
Melting Temperature	130	°C	
Peak Crystallization Temperature (DSC)	113	°C	ASTM D3418
NOTE			
1.	Type 4, 51mm/min		
2.	Type 4, 51mm/min		
3.	13 mm/min		
4.	速率 A (50°C/h), 压 力1 (10N)		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China


WECHAT