



### Typical Application

Large Shipping Containers, Open Head Pails, 55-gallon Drum Lids

### Product Description

Ramolene HDIM 53450 is high density copolymer with a narrow molecular weight distribution that provides high impact strength and stress crack resistance, excellent color, low odor, and good processability.

Typical Properties	English Unit	SI Unit	ASTM
<b>Physical</b>			
Melt Flow Rate (190 °C / 2.16 kg)	4.5 g/10 min	4.5 g/10 min	D1238
Density (23 °C)	0.953 g/cm <sup>3</sup>	0.953 g/cm <sup>3</sup>	D1505
Bulk Density	38 lb/ft <sup>3</sup>	609 kg/m <sup>3</sup>	D1895
Spiral Flow	7.8 in	19.8 cm	Producer Method
<b>Mechanical Stress &amp; Impact</b>			
Flexural Modulus 1% Secant	173,000 psi	1,194 MPa	D790
Flexural Modulus 2% Secant	142,000 psi	980 MPa	D790
Flexural Young's Modulus	187,000 psi	1,290 MPa	D790
Tensile Modulus (1% Secant)	106,000 psi	732 MPa	D638
Tensile Young's Modulus	130,000 psi	897 MPa	D638
Tensile Stress/Strength at Break (23 °C)	4,000 psi	28 MPa	D638
Tensile Stress/Strength at Yield (23 °C)	4,000 psi	28 MPa	D638
Tensile Elongation at Break (23 °C)	1,700 %	1,700 %	D638
Tensile Elongation at Yield (23 °C)	11 %	11 %	D638
Notched Izod Impact Strength (23 °C)	1.2 ft-lb/in	64.1 J/m	D256
Unnotched Impact Strength (-18 °C)	No Break	No Break	D4812
<b>Hardness</b>			
Durometer Shore Hardness (Shore D)	71	71	D2240
<b>Thermal</b>			
Vicat Softening Temperature	262 °F	127.8 °C	D1525
Low Temperature Brittleness, F <sub>50</sub>	< -105 °F	< -76 °C	D746
Deflection Temperature Under Load (66 psi)	164 °F	73.3 °C	D648
Melting Temperature	268.2 °F	131.2 °C	D3418
Crystallization Temperature	241 °F	116.1 °C	D3418

All tests were run under laboratory conditions, ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of Ramtech's products must be guided by the user's own methods for selection of proper formulation. RAMTECH OVERSEAS, INC. disclaims any responsibility for misuse or misapplication of its products. Ramtech makes no warranty of merchantability and there is no warranty that goods supplied shall be fit for any particular purpose.