

# Indothene HD HD53MA020

High Density Polyethylene

Reliance Industries Limited

## Message:

Indothene-HD HD53MA020 is a low MI High Density Polyethylene grade produced using the process know-how of M/s. BP Chemicals. This grade is specially designed and recommended for manufacture of technical moulding articles such as Caps and closures for various applications. It has a very narrow molecular weight distribution, which makes it very much suitable for Injection Moulding and products manufactured have very good gloss, impact strength and rigidity.

### FOOD CONTACT APPLICATIONS :

This grade shall meet the requirements of Indian Standard IS-10146-1982 on "Polyethylene for its safe use in contact with food stuffs, pharmaceuticals and drinking water". It shall also conform to the positive list of constituents as approved in IS:10141:1982. The grade & additive used shall comply with FDA regulation : CFR title 21 , 177.1520, Olefin polymer.

General Information			
Features	Food Contact Acceptable Good Impact Resistance High Gloss Medium Rigidity Narrow Molecular Weight Distribution		
Uses	Caps Closures		
Agency Ratings	FDA 21 CFR 177.1520		
Appearance	Natural Color		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	0.953	g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	64		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>1</sup> (Yield, 3.20 mm, Injection Molded)	26.0	MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break, 3.20 mm, Injection Molded)	800	%	ASTM D638
Flexural Modulus <sup>3</sup> (3.20 mm, Injection Molded)	1000	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.20 mm, Injection Molded)	300	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method

Vicat Softening Temperature	121	°C	ASTM D1525
Peak Crystallization Temperature (DSC)	130	°C	ASTM D3418
<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>	
Rear Temperature	180 to 280	°C	
Middle Temperature	180 to 280	°C	
Front Temperature	180 to 280	°C	
Nozzle Temperature	200 to 280	°C	
Mold Temperature	40.0 to 70.0	°C	
Injection Pressure	58.8 to 98.1	MPa	

**NOTE**

1. Type I
2. Type I
3. Type I

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

**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

