

M5220



High Density Polyethylene

Injection Molding

Product Description:

HDPE M5220 is a natural colored grade produced with the latest Ineos Gas Phase polymerization

Technology exhibiting following features:

- ✓ Good Flow
- ✓ High Warpage Resistance
- ✓ Suitable for faster molding cycles

HDPE M5220 is recommended for following applications:

- ✓ Housewares, storage bins
- ✓ Thin wall food containers
- ✓ Caps & Closures
- ✓ Base resin for masterbatch

Typical Properties:

Sr. No.	Properties	Test Method	Units	Values*
Physical Properties				
1	Melt Flow Index (190°C & 2.16 kg)	ASTM D1238	g / 10 min	21
2	Density (at 23 °C)	ASTM D1505	gm/cm ³	0.952
Mechanical Properties				
3	Tensile Strength @ Yield (50mm / min)	ASTM D638	MPa	22.0
4	Elongation @ Break (50mm / min)	ASTM D638	%	350
5	Flexural Modulus	ASTM D790	MPa	900
6	Izod Impact Strength (at 23 °C)	ASTM D256	J/m	30
7	Hardness	ASTM D2240	Shore D	62
Thermal Properties				
8	Vicat Softening Point (10N)	ASTM D1525	°C	125
9	Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	80
** Mechanical Properties tested on Injection molded specimen in accordance with ASTM D4101 and conditioned as per ASTM D618.				
* Typical Values and not to be taken as specification limits, values may change without any prior notice.				

Recommended Processing Temperature: 190 – 230 °C

Note: This product is not to be used in the manufacture of SUP (Single Use Plastic) items prohibited under PWM (Plastics Waste Management) Rules, 2016.

Disclaimer: OPaL assumes no liability whatsoever in respect of application, processing or any use made of the afore - mentioned information or products, or any consequence thereof. The user undertakes all liability in respect of the application, processing or use of the afore - mentioned information or product, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attached to any of the OPaL companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the afore-mentioned information or products by the user.

Contact: ONGC Petro Additions Ltd., 35, Nutan Bharat Co-operative Housing Society Limited., R.C. Dutt Road, Alkapuri, Vadodara-390007, Gujarat India, Telephone: +91 265 6192600, Fax: +91 265 6192622, Corporate Site: www.opalindia.in PARC/2022/06 - 02

Provisional Technical Datasheet

M5220



Regulatory Requirements:

HDPE grade M5220 meets the requirements stipulated in IS 10146:1982 on 'Specification of Polyethylene for safe use in contact with Foodstuff, Pharmaceutical & Drinking water'. The grade and Additives incorporated in this grade meets the positive list of constituents as prescribed in IS 10141:1982. The Grade and the additives incorporated in it also comply with the FDA: CFR Title 21,177.1520, Olefin Polymers.

Storage & Handling:

Prevent Polyethylene Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the Storage temperature should not exceed 50 °C. Non - compliance to these precautionary measures can lead to degradation of the product causing Color changes, Odor & inadequate product performance.

Health and Safety Information:

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at www.opalindia.in. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.



ONGC Petro additions Ltd

Disclaimer: OPAL assumes no liability whatsoever in respect of application, processing or any use made of the afore - mentioned information or products, or any consequence thereof. The user undertakes all liability in respect of the application, processing or use of the afore - mentioned information or product, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attached to any of the OPAL companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of application, processing or use of the afore-mentioned information or products by the user.

Contact: ONGC Petro Additions Ltd., 35, Nutan Bharat Co-operative Housing Society Limited., R.C. Dutt Road, Alkapuri, Vadodara-390007, Gujarat India, Telephone: +91 265 6192600, Fax: +91 265 6192622, Corporate Site: www.opalindia.in PARC/2022/06 - 02