



GAIL (India) Ltd.
(A Govt. of India Undertaking)
Petrochemicals Marketing

I50A180

High Density Polyethylene for Injection Moulding

Product Description and Typical Applications:

I50A180 is recommended for manufacturing household products like bucket, mug etc. It provides excellent processability with low degree of warpage and superior gloss. The material conforms to natural resin designation IS 7328-3B-MB-FXDE of IS 7328:2020.

Property	Values*	Unit	Test Method
Melt Flow Index (I ₂)	20	g/10min	ASTM D1238
Density @ 23°C	0.952	g/cc	ASTM D1505
Tensile Strength @ Yield	230	kg/cm ²	ASTM D638, Type IV
Elongation @ Yield	12	%	ASTM D638, Type IV
Flexural Modulus	8500	kg/cm ²	ASTM D790
Izod Impact Strength	30	J/m	ASTM D 256
ESCR (10% Igepal), F ₅₀	<10	hrs	ASTM D 1693
Vicat Softening Point	122	°C	ASTM D1525

* Typical characteristics of the product given purely as a guide. Mechanical properties were determined on compression moulded specimens.

Processing Guidelines:

Barrel temperature: 200 - 280°C

Mould temperature: 25 - 40°C

Regulatory Information:

Certificate is available on request.

Packaging & Storage:

I50A180 is available in natural colour, pellet form in 25 kg woven sacks. The product should be stored in dry conditions at temperature below 50°C and protected from UV light.

For any technical assistance contact:

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The information, data and suggestions contained herein are to the best of our knowledge accurate and reliable. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user specific application.