



GAIL (India) Ltd.

(A Govt of India Undertaking)

Petrochemicals Marketing

B55HM0003/B55HM0003N

High Density Polyethylene for Blow Moulding

Product Description and Typical Applications:

B55HM0003/B55HM0003N is a blow moulding grade of high molecular weight and bi-modal molecular weight distribution for better processability and excellent mechanical properties. It offers an optimum combination of ESCR, stiffness and creep strength. It is widely used for medium to large bulk containers (up to 120 liters) mainly for chemicals and oils (open top and mouth barrels, jerry cans etc.). The material conforms to natural resin designation IS-7328-3B-BB-FXDA of IS 7328:2020.

Property	Values*	Unit	Test Method
Melt Flow Index (I ₂)	0.08	g/10min	ASTM D1238
Melt Flow Index (I ₃)	0.40	g/10min	ASTM D1238
Melt Flow Index (I _{21.6})	11	g/10min	ASTM D1238
Density @ 23°C	0.954	g/cc	ASTM D1505
Tensile Strength @ Yield	250	kg/cm ²	ASTM D638, Type IV
Elongation @ Yield	11	%	ASTM D638, Type IV
Flexural Modulus	10000	kg/cm ²	ASTM D790
Izod Impact Strength	230	J/m	ASTM D256
Shore D Hardness	62	-	ASTM D2240
ESCR (10% Igepol), F ₅₀	>1000	hrs	ASTM D1693
Vicat Softening Point	124	°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: 180 - 220°C

Die temperature: 210 - 225°C

Cooling water for mold: 25 - 30°C

Regulatory Information:

Certificate is available on request.

Packaging & Storage:

B55HM0003/B55HM0003N 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:

GAIL Polymer Technology Centre, GAIL (India) Limited

PARC Building, Plot No. 24, Sector-16A, Noida, (U.P.) India – 201301

Ph.: 0120-2515353/354/355/363 Fax No.: 0120-2511134, Website: www.gailonline.com

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.