# GAIL (India) Ltd.

(A Govt. of India Undertaking)
**Petrochemicals Marketing**

# F55HM0003/F55HM0003N

## High Density Polyethylene for Film Extrusion

## Product Description and Typical Applications:

**F55HM0003/F55HM0003N** is a blown film high density polyethylene grade of high molecular weight, possessing bi-modal molecular weight distribution for better processability with excellent mechanical properties. The combination of high strength and excellent drawdownability makes this grade an ideal material for thin gauge film applications. It is recommended for film applications like; carry bags, shopping bags, trash bags, grocery bags industrial liners etc. The material conforms to natural resin designation IS 7328-3B-FBE-FXDA of IS 7328:2020.

| Property | Values* | Unit | Test Method |
|---|---|---|---|
| Melt Flow Index ($I_2$) | 0.09 | g/10min | ASTM D1238 |
| Melt Flow Index ($I_{21}$) | 13 | g/10min | ASTM D1238 |
| Density @ 23°C | 0.954 | g/cc | ASTM D1505 |
| Tensile Strength @ Break (MDTD) | 400/350 | kg/cm$^2$ | ASTM D882 |
| Elongation @ Break (MD/TD) | 400/500 | % | ASTM D882 |
| Tear Strength (MD/TD) | 1/5 | g/mic | ASTM D1922 |
| Dart Impact Strength | 5 | g/mic | ASTM D1709 |
| Vicat Softening Point | 123 | °C | ASTM D1525 |

* Typical characteristics of the product given purely as a guide. Film properties were determined on Film Thickness = 20 micron, BUR = 4.0

## Processing Guidelines:
Barrel temperature: 180 - 220$^0$C

## Regulatory Information:
Certificate is available on request.

## Packaging & Storage:
F55HM0003/F55HM0003N is available in natural colour, pellet form in 25 kg woven sacks. The product should be stored in dry conditions at temperature below 50$^o$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.