



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

P46A010U

High Density Polyethylene for Pipe

Product Description and Typical Applications:

P46A010U is Ethylene Hexene Co-polymer grade, recommended for pipe application like potable water, sprinkler, effluent and waste water systems, cable duct meeting the hydrostatic strength requirements as per IS 4984:2016 for PE-63 material. The material conforms to natural resin designation IS 7328-3H-PB-EXTA of IS 7328:2020.

| Property | Values* | Unit | Test Method |
|----------|---------|------|-------------|
|----------|---------|------|-------------|

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|------------------------------------|-------|--------------------|------------|
| Melt Flow Index (I ₂) | 0.22 | gm/10min | ASTM D1238 |
| Melt Flow Index (I ₅) | 0.95 | gm/10min | ASTM D1238 |
| Density @ 23°C | 0.948 | gm/cc | ASTM D1505 |
| Tensile Strength @ Yield | 230 | kg/cm ² | ASTM D638 |
| Elongation @ Yield | 12 | % | ASTM D638 |
| Flexural Modulus | 8700 | kg/cm ² | ASTM D790 |
| Izod Impact Strength | 120 | J/m | ASTM D256 |
| ESCR (10% Igepol), F ₅₀ | >48 | hrs | ASTM D1693 |
| Vicat Softening Point | 123 | °C | ASTM D1525 |

* Typical characteristics of the product given purely as a guide. Mechanical properties were measured on compression molded sample.

Processing Guidelines:

Barrel temperature: 170 - 220°C

Regulatory Information:

Certificate is available on request.

Packaging & Storage:

P46A010U 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.