



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
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:

GAIL Polymer Technology Centre, GAIL (India) Limited

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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.