P54A001/P54A001N

High Density Polyethylene for Pipe Extrusion

Product Description and Typical Applications:

P54A001/P54A001N is recommended for pipe application like potable water (IS 4984), sprinkler irrigation (IS 17425) and sewerage (IS 14333), meeting the hydrostatic strength requirements as per IS 4984:2016 for PE-80 material. It offers excellent processability, chemical resistance and mechanical properties. The material conforms to natural resin designation IS 7328-3B-PB-FXTA of IS 7328:2020.

Property	Values*	Unit	Test Method
Melt Flow Index (I_2)	0.09	g/10min	ASTM D1238
Melt Flow Index (I_5)	0.46	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
Elongation @ Break	>600	%	ASTM D638, Type IV
Flexural Modulus	10000	kg/cm^2	ASTM D790
Izod Impact Strength	140	j/m	ASTM D256
Shore D Hardness	62	-	ASTM D2240
ESCR (10% Igepol), F_{50}	>500	hrs	ASTM D1693
Vicat Softening Point	123	°C	ASTM D1525
Thermal Stability (OIT)	>45	minutes	ASTM D3895

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

Processing Guidelines:
Barrel temperature: 170 - 210°C

Regulatory Information:
Certificate is available on request.

Packaging & Storage:
P54A001/P54A001N is available in natural colour, pellet form in 25 kg woven sacks. The product should be stored in dry conditions at temperature below 50ºC 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.