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

E52U003/E52U003N

High Density Polyethylene for PLB/DWC Ducts

Product Description and Typical Applications:

E52U003/E52U003N is UV stabilized grade recommended for PLB/DWC HDPE Telecom ducts. The material conforms to **DoT, TEC** specifications:

(a) Generic Requirements No. TEC/GR/FA/CDS-008/04/AUG-2019, for 'Permanently Lubricated HDPE Telecom ducts for use as underground Optical Fiber Cable conduits.

(b) Generic Requirements No. TEC/GR/FA/DWC-034/02/AUG-2019 for 'Double Walled Corrugated HDPE Ducts (DWC).

The material conforms to natural resin designation IS 7328-3B-PD-FXTA of IS 7328:2020.

Property	Values*	Unit	Test Method
Melt Flow Index (I_5)	0.95	g/10min	ASTM D1238/IS 2530
Density @ 23°C	0.954	g/cc	ASTM D1505/IS 2530
Tensile Strength @ Yield	240	kg/cm^2	ASTM D638, Type IV
Elongation @ Yield	10	%	ASTM D638, Type IV
Elongation @ Break	>600	%	ASTM D638, Type IV
Flexural Modulus	10000	kg/cm^2	ASTM D790
Izod Impact Strength	120	j/m	ASTM D256
Shore D Hardness	62	-	ASTM D2240
ESCR (10% Igepol), F_{50}	>500	hrs	ASTM D1693
Heat Deflection Temperature (45 g/mm^2)	67	°C	ASTM D648
Vicat Softening Point	123	°C	ASTM D1525
Thermal Stability (OIT)	>45	minutes	ASTM D3895/DoT

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

Processing Guidelines:

Barrel temperature: 170 - 200°C

Regulatory Information:

Certificate is available on request.

Packaging & Storage:

E52U003/E52U003N 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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