



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	24	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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Need pricing, availability, or technical support? Explore our website - www.jitsy.in

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.