Provisional Technical Datasheet

High Density Polyethylene 010DP45 for Pipe & Pipe Fitting Application

Product Description :

HDPE 010DP45 is a natural colored high density bimodal grade with good Processability and mechanical properties . This Grade shall meet the MFI, Density & hydrostatic Strength requirements of material grade PE 63 as per IS: 4984:1995 on "High Density Polyethylene pipe for water supply - Specification". The designation of the natural resin 010DP45 is PE-ENA-C45-T012 as per IS: 7328 - 1992 and shall meet the same given in the amendment No.2 of IS: 4984: 1995. When Incorporated with Adequate quantity of carbon black as specified in the clause 5.2.3 of IS: 4984: 1995, will meet the requirements of the designation PE-EW-C45-T012 mentioned in the 5.2 of IS: 4984: 1995

HDPE 010DP45 is recommended for drinking water, drinking water and sprinkler systems. It is also recommended for pipes for industrial effluents and pesticide bottles upto 1 litre capacity

Typical Properties*

Sr. No.	Properties	Test Method	Units	Values**
1	Melt Flow Index (190°C & 5.00 kg)	ASTM D1238	dg / min	1.0
2	Density (23°C)	ASTM D1505	gm / cc	0.947
3	Tensile Strength @ Yield	ASTM D638	MPa	24
4	Elongation @ Break	ASTM D638	%	> 500
5	Elongation @ Yield	ASTM D638	%	11
6	Flexural Modulus	ASTM D790	MPa	900
7	Hardness	ASTM D2240	Shore D	64
8	Oxidative Induction Time	ASTM D3895	Min	>20

* Typical Values and not to be taken as specifications

**Compression moulded specimen for mechanical properties

Regulatory Requirements:

HDPE 010DP45 shall meet "Specification for Polyethylene" for safe use in contact with Foodstuff, Pharamaceutical & Drinking water as per IS:10146-1982. The grade and Additives incorporated shall meet with FDA:CFR Title21,177.1520, Olefin Polymers.

Storage & Handling:

Prevent HDPE Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the storage temperature should not exceed 50°C. Non - compliance to these precautionary measures can lead to degradation of the product.

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