



Data Sheet

PID1

Linear Low Density Polyethylene (LLDPE) compound for the production of drip irrigation pipes

Description:

PID1 is a black linear low density polyethylene compound. It's suitable for production of pipes for drip irrigation.

PID1 is characterized by:

- * Good mechanical properties
- * High Environmental Stress Cracking Resistance, (ESCR)
- * Good Process ability
- * It contains 2.5% of well-dispersed carbon black in order to ensure excellent weathering resistance

Specification:

According to ISO 8779

Color: Black

Properties	Unit	Typical Value	Standard and Test Method
Density compound	gr/cm ³	0.94±0.01	ASTM D792
Melt Flow Index(190C/2.16kg)	gr/10min	0.4±0.05	ASTM D1238
Carbon black content	%	2-2.5	ASTM D1603
Properties before ageing Tensile strength Elongation at break	N/mm ² %	min 17 min 600	ASTM D638
O.I.T at 200°C	min	min 30	ASTM D3895
E.S.C.R(50°C.Cond.B-10% Igepal)	h	>2000	ASTM D1693
Hardness	Shore D	56±1	ASTM D2240(15sec)
Carbon black Dispersion	----	max 2.5	BS 2782 , ISO 18553



Processing Guidelines:

PID01 provides excellent surface finish. We suggest a temperature profile as below:

	zone 1	zone 2	zone 3	zone 4	head	die
max (°C)	170	180	180	190	200	220
min (°C)	150	160	160	170	180	200

If preheating and/or drying are used, the maximum temperature should be 90°C.

Safety:

PID01 is classified as no-dangerous material.

Packaging:

It is available in the form of pellets and supplied in PP laminated bag with a net content of 25 kgs.