

Technical Data Sheet

HWP-100 Compound



Description

HWP-100 is a general-purpose HDPE compound (equivalent to PE100 class) engineered for pressure pipe applications. HWP-100 offers excellent processability, long-term hydrostatic strength, mechanical strength, ESCR, and good temperature-pressure resistance.

General

Form: Black Pellets

Process: Extrusion

Application: PE100 class pipes, Water pressure pipes, Industrial and sewage pipelines

Additives: AO, PPA, Carbon Black

Packaging: 25 kg sack / 850 kg big bag

Physical Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Index (190°C/5kg)	ISO 1133	g/10 min	0.23±0.02
Tensile Strength at Break	ISO 527	MPa	28
Elongation at Break	ISO 527	%	700
Carbon Black Content	ISO 6964	%	2.3
Oxidation Induction Time	ISO 11357	min	30
Vicat Softening Temperature	ISO 306	°C	128
Hydrostatic Strength (@80°C)	ISO 1167	h	>165
ESCR (50°C, F50)	ISO 22088	h	>1000

Processing Guidelines

The compound provides excellent surface finish and output rates over a broad range of conditions in PE screw extruder; however, the optimum results are recommended as follows:

- Barrel Temperatures: 150-220 °C
- Die Head Temperatures: 230-240 °C

Notes

- The typical properties have been determined using laboratory equipment. Users are advised to verify results through their own standard testing methods.
- The compound is suitable for use on various machines; however, minor adjustments may be required for individual equipment. Customers are advised to verify product quality prior to commercial use.
- The compound should be stored in its original packaging under cool and dry conditions, protected from direct sunlight, heat and contamination. The recommended storage period at the customer's site should not exceed two years.

