

Technical Data Sheet

TRP-780 Compound



Description

TRP-780 is an optimized formulation of polyethylene of raised temperature resistance (PERT) compound specifically designed for hot & cold water pressure pipe and under-floor heating applications. TRP-780 offers outstanding long-term hydrostatic strength, excellent resistance to slow crack growth, and enhanced thermal stability, ensuring safe and durable operation in demanding service conditions.

General

Form: Natural Pellets

Process: Extrusion

Application: PERT pressure pipes, Hot & cold water pipes, Underfloor and radiator heating systems

Additives: AO, PPA

Packaging: 25 kg sack

Physical Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.945±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	0.5±0.1
Tensile Strength at Break	ISO 527	MPa	26
Elongation at Break	ISO 527	%	700
Hardness	ISO 868	Shore D	62
Melting Point	ISO 11357	°C	128
Oxidation Induction Time	ISO 11357	min	60
Hydrostatic Strength (@95°C)	ISO 1167	h	>1000
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: 150-230 °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.

