

Technical Data Sheet

URM-380 Compound



Description

URM-380 is an engineered roto-molding MDPE compound with advanced UV and thermal additives designed for the rotational molding process. URM-380 exhibits outstanding impact and mechanical strength, resistance to outdoor weathering, stress-cracking, and long-term durability, making it ideal for water storage tank applications.

General

Form: Natural Pellets/Powders

Process: Rotational molding

Application: Water and chemical storage tanks, Automotive components, Industrial hollow parts

Additives: AO, PPA, Filler

Packaging: 25 kg sack / 850 kg big bag

Physical Properties

Property	Test Method	Unit	Result
Density	ISO 1183	g/cm ³	0.940±0.005
Melt Flow Rate (190°C/2.16kg)	ISO 1133	g/10 min	4±0.5
Filler Content	ISO 3451	%	<1
Tensile Strength at Break	ISO 527	MPa	22
Elongation at Break	ISO 527	%	750
Hardness	ISO 868	Shore D	60
Vicat Softening Temperature	ISO 306	°C	128
Oxidation Induction Time	ISO 11357	min	60
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 rotational molding machine; however, the optimum results are recommended as follows:

- Melt Temperatures: 180-260 °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.

