

Refining & Chemicals
Polymers

Technical data sheet
Medium Density Polyethylene PIPES & FITTINGS
Produced in Europe

Description

MDPE 3802 B is a high performance hexene-based black compound, with a MRS 8 MPa - PE 80 classification, and primarily intended for potable water and gas pipe applications. MDPE 3802 B key characteristics are

- > a superior resistance to slow crack growth ensuring safe and long-term network operation
- an optimal balance of flexibility and mechanical strength that allows easy coiling, handling and installing of pipes
- an optimised formulation of additives and finely dispersed carbon black providing outstanding long-term stability in service.

Designation ISO 1872-PE,E/M-ACGHL,40-T012

Characteristics

Property	Method	Unit	Typical value (*)
Density	ISO 1183	kg/m³	948
Melt Flow Rate (190°C/5 kg)	ISO 1133/T	g/10 min	0.9
Thermal stability 200°C	EN 728 / ISO 11357-6	min	> 20
Carbon black content	ISO 6964	%	2.0 – 2.5
Carbon black dispersion	ISO 18553	rating	≤ 3
Water content (**)	EN 12118	ppm	≤ 300

- (*) Data not intended for specification purposes
- (**) Measured at the stage of compound manufacturing

Processing

MDPE 3802 B can be processed under the following recommended conditions.

Adjustments may be useful depending upon the pipe/fitting dimensions, appearance and/or the type of processing equipment used.

Extrusion melt temperature 190-220°C

Injection melt temperature 200-260°C

Carbon black is hygroscopic, consequently drying of the compound is required to ensure that the water content does not exceed 300 ppm at the time of processing.