

## Description

MDPE HT 514 is a medium density polyethylene produced by slurry loop process with hexene as co-monomer.

MDPE HT 514 is a semi-high molecular weight polyethylene giving excellent mechanical properties. It shows a broad molecular weight distribution ensuring outstanding processability.

MDPE HT 514 can be used alone, blended or coextruded in a wide variety of blown film applications : consumer, industrial, food or hygiene packaging.

## Characteristics

Property	Method	Unit	Typical value
Density	ISO 1183	g/cm <sup>3</sup>	0.938
Melt Flow Rate at 190°C/2.16 kg	ISO 1133	g/10 min	0.15
Melt Flow Rate at 190°C/21.6 kg	ISO 1133	g/10 min	14
Melting temperature	ISO 11357	°C	126
Vicat temperature	ISO 306	°C	121
Flexural Modulus (0.25% max)	ISO 178	MPa	740

Values indicated are typical for this product. Density and MFR are properties routinely measured during "the standard quality control procedure". The other figures are generated by tests not included in the "standard quality control procedure", and are given for information only. Data are not intended for specification purposes.

## Additives

Antioxidant: Yes

## Processing

MDPE HT 514 can be processed on almost HD-, LD- and LLDPE blown film equipment.

However, to get the best mechanical properties, MDPE HT 514 is advised to be extruded in HDPE configuration (high neck, high blow up ratio, small die gap).

MDPE HT 514 is typically extruded between 190 and 220°C and should never exceed 250°C.

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**Blown film properties**

Property	Method	Unit	Typical value (*)
Tensile Strength at Yield MD/TD	ISO 527-3	MPa	
film 20 µm			21/22
film 40 µm			20/20
Tensile Strength at Break MD/TD	ISO 527-3	MPa	
film 20 µm			69/51
film 40 µm			56/52
Elongation at Break MD/TD	ISO 527-3	%	
film 20 µm			420/520
film 40 µm			530/620
Elmendorf MD/TD	ISO 6383-2	N/mm	
film 20 µm			9/130
film 40 µm			17/185
Dart test	ISO 7765-1	g	
film 20 µm			190
film 40 µm			260

(\*) Figures stated here above are obtained using laboratory test specimens produced with the following HDPE configuration: 70 mm screw diameter, L/D = 25, die diameter = 120 mm, die gap = 1.2 mm, BUR = 4.5:1, output = 100 kg/h, neck height = 100 cm, temperature = 210°C.

**Handling and storage**

Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within one year after delivery provided storage conditions are used as given in the SDS of our product. SDS may be obtained from the website:

Polyethylene

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