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Refining & Chemicals  
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## Description

MDPE HR 515 is a medium density polyethylene produced with hexene as co-monomer. It shows a broad molecular weight distribution ensuring outstanding processability.

MDPE HR 515 is especially dedicated to high rigidity film applications, particularly in blend and/or coextrusion with LDPE and/or LLDPE.

MDPE HR 515 is suited for many film applications, in the field of consumer, industrial, food or hygiene packaging.

## Characteristics

Property	Method	Unit	Typical value
Density	ISO 1183	g/cm <sup>3</sup>	0.942
Melt Flow Rate at 190°C/2.16 kg	ISO 1133	g/10 min	0.22
Melt Flow Rate at 190°C/21.6 kg	ISO 1133	g/10 min	17.5
Melting temperature	ISO 11357	°C	127
Vicat temperature	ISO 306	°C	124
Flexural Modulus (0.25% max)	ISO 178	MPa	810

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.

Information contained in this publication is true and accurate at the time of publication and to the best of our knowledge. The nominal values stated herein are obtained using laboratory test specimens. These are typical values not to be construed as specification limits. Before using one of the products mentioned herein, customers and other users should take all care in determining the suitability of such product for the intended use. Unless specifically indicated, the products mentioned herein are not suitable for applications in the pharmaceutical or medical sector. The Companies within TotalEnergies Petrochemicals do not accept any liability whatsoever arising from the use of this information or the use, application or processing of any product described herein. No information contained in this publication can be considered as a suggestion to infringe patents. The Companies disclaim any liability that may be claimed for infringement or alleged infringement of patents.



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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			23/24
film 40 µm			22/22
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	
film 20 µm			65/53
film 40 µm			55/51
Elongation at Break MD/TD (**)	ISO 527-3	%	
film 20 µm			450/540
film 40 µm			580/660
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	
film 20 µm			8/130
film 40 µm			12/150
Dart test	ISO 7765-1	g	
film 20 µm			145
film 40 µm			190

(\*) Figures stated hereabove 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.

(\*\*) MD : Machine Direction, TD : Transverse Direction

**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: [www.polymers.totalenergies.com](http://www.polymers.totalenergies.com).

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