



# SAFFRON GROUP

## mPE M5510 EP

### Product Specification

#### DESCRIPTION

mPE M5510 EP is a second generation metallocene high density homopolymer Polyethylene.

mPE M5510 EP can be processed at high output rates with low extrusion pressure, excellent bubble stability and gauge control in comparison with conventional LLDPE and first generation metallocene based polyethylene. The outstanding stiffness combined with good optical properties brings a significant down-gauging potential.

The high density of mPE M5510 EP enables its use in applications with moisture barrier requirements, such as dry food packaging, and brings improved heat resistance, compared to commonly used HDPE.

mPE M5510 EP is suited for many applications in the field of consumer, industrial, food or hygiene packaging such as bags, heavy-duty sacks, automatic packaging specialty film, mailing film and lamination.

#### CHARACTERISTICS

PROPERTY	METHOD	UNIT	TYPICAL VALUE
Density	ISO 1183	g/cm <sup>3</sup>	0.955
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10 min	1.2
Melting temperature	ISO 11357	°C	134
Vicat temperature	ISO 306	°C	133

Values indicate 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 purpose.

#### PROCESSING

mPE M5510 EP is typically extruded at a melt temperature around 210°C. mPE M5510 EP can be blown easily at any of the following conditions:

- Temperature: 200 to 230°C
- BUR : 1.5:1 to 4.5:1
- Die gap : 0.8 to 2.8 mm

An excellent blending ability of mPE M5510 EP with LDPE and LLDPE was observed.

#### ADDITIVES

Antioxidant: yes

PPA: yes

FOR MORE INFORMATION :

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## BLOWN FILM PROPERTIES

These values have been measured on a 40 µm blown film.

PROPERTY	METHOD	UNIT	TYPICAL VALUE (*)
Tensile Strength at Yield MD/TD (**)	ISO 527-3	Mpa	27.5/28
Tensile Strength at Break MD/TD (**)	ISO 527-3	MPa	57/45
Elongation at Break MD/TD (**)	ISO 527-3	%	870/910
Elmendori MD/TD (**)	ISO 6383-2	N/mm	11/90
Dart test	ISO 7765-1	g	100
Haze	ISO 14782	%	24
Gloss 45°	ASTM D2457		40

(\*) Figures stated hereabove are obtained using laboratory test specimens produced at the following extrusion conditions: 45mm screw diameter, L/D = 30, die diameter = 120mm, die gap = 1.4mm, BUR 2.5:1, temperature = 210°C

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

## Technical Disclaimer

The values reported in this technical data sheet are the results of tests carried out in accordance with standard test procedures in a laboratory environment. Actual properties may vary depending on batch and extrusion conditions. Therefore, these values should not be used for specification purposes. Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question, and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suitable for, and the information is applicable to, the user's specific application. Muntajat does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, expressed or implied, or allegedly arising from any usage of any trade or from any course of dealing, in connection with the use of the information contained herein or the product itself. The user expressly assumes all risks and liabilities, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Trademarks may not be used in any manner other than expressly authorized in a written agreement and no trademark or license rights of any kind are granted hereunder, by implication or otherwise.

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