



# SAFFRON GROUP

## 22ST05

### Product Specification

#### DESCRIPTION

22ST05 is a polyethylene blown film grade that is especially designed to have an excellent processability on extrusion and conversion lines and to give a very high toughness – stability balance allowing new innovative multilayer film concepts. Thanks to this innovative design, 22ST05 brings a huge down-gauging potential in the 1m market.

#### CHARACTERISTIC

PROPERTY	METHOD	VALUES	TESTING METHODS
Density	ISO 1183	g/cm <sup>3</sup>	0.921
Melt Flow Rate (190°C/2,16 kg)	ISO 1133	g/10 min	0.5
Melting Temperature	ISO 11357	°C	113
Vicat Temperature	ISO 306	°C	106

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.

#### PROCESSING

22ST05 is typically extruded at a melt temperature around 190°C and can be blown easily at any of the following conditions:

- Possibility to blend Supertough with a wide variety of products
- Optimal result in pure or in blend with low amount of another product in the same layer
- Wide range of thicknesses achievable
- Versatile product for different extrusion technologies : Low & High neck conformation, cast & MDO
- Temperature: 180 to 230°C
- BUR: 1.5:1 to 5.0:1
- Die gap: 1.2 to 2.8 mm

#### ADDITIVES

Antioxidant: yes

PPA: yes

FOR MORE INFORMATION :

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## BLOWN FILM PROPERTIES

PROPERTY	METHOD	UNIT	TYPICAL VALUE (*)
Tensile Strength at Yield MD/TD (**)	ISO 527-3	Mpa	9.8 / 10.1
Tensile Strength at Break MD/TD (**)	ISO 527-3	Mpa	65 / 60
Elongation at Break MD/TD (**)	ISO 527-3	%	629 / 686
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	75 / 150
Dart Test	ISO 7765-1	g	>1000
Haze	ISO 14782	%	7
Gloss 45°	ASTM D2457		60

(\*) Figures stated hereabove are obtained using laboratory test specimens produced with the following extrusion conditions: 45 mm screw diameter, L/D = 30, die diameter = 120 mm, die gap = 1.4 mm, BUR = 2.5:1, temperature = 195 °C.

These values have been measured on a 40 µm blown film in high neck conformation.

PROPERTY	METHOD	UNIT	TYPICAL VALUE (*)
Tensile Strength at Yield MD/TD (**)	ISO 527-3	Mpa	10.5 / 10.0
Tensile Strength at Break MD/TD (**)	ISO 527-3	Mpa	66 / 65
Elongation at Break MD/TD (**)	ISO 527-3	%	580 / 620
Elmendorf MD/TD (**)	ISO 6383-2	N/mm	75 / 125
Dart Test	ISO 7765-1	g	>1500
Haze	ISO 14782	%	11
Gloss 45°	ASTM D2457		47

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

(\*\*\*) Figures stated hereabove are obtained using laboratory test specimens produced with the following extrusion conditions: 70 mm screw diameter, L/D = 25, die diameter = 120 mm, die gap = 1.2 mm, BUR = 4.0:1, temperature = 200°C

## 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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