

LOTADER[®] 5500

TERPOLYMER Ethylene – Acrylic Ester– Maleic Anhydride

Description

LOTADER 5500 is a random terpolymer of Ethylene, Acrylic Ester and Maleic Anhydride, polymerized by high pressure autoclave process. These grade is characterised by a high fluidity.

Main applications

Functional groups contribute to the outstanding adhesive properties of **LOTADER 5500** on various substrates. **LOTADER 5500** is mainly used pure or in blends with polyolefins as thermoadhesive films or adhesives.

Typical characteristics

Characteristics	Value	Unit	Test Method
Melt index (190°C / 2,16 kg)	20	g/10mn	ASTM D 1238
Ethyl Acrylate Content	20	% wt	IRTF (internal)
Maleic Anhydride content	2.8	% wt	IRTF (internal)

Main properties

- As an ethylene copolymer, **LOTADER 5500** is compatible with LDPE in all proportions, and with almost all other ethylene copolymers.
- Acrylic Ester brings softness and polarity, while keeping high thermal stability during processing.
- Maleic Anhydride gives reactivity, leading to very versatile adhesive properties to polar and non polar substrates (thermoadhesive film) and to molten polymers.

Processing

- Standard polyolefin extrusion equipment can be used for **LOTADER 5500**, which has the same processability as LDPE and is not corrosive.
- Heat stability of acrylate comonomers allows processing temperatures as high as for LDPE.
- Purging **LOTADER 5500** is readily achieved using LDPE, and it is recommended to do it before shutdown.

Physical properties

Characteristics	Value	Unit	Test Method
Density (23°C)	0.94	-	ISO 1183
Melting point	80	°C	DSC
Vicat softening point (1 kg)	45	°C	ASTM D 1525 / ISO 306
Elongation at break (1)	700	%	ASTM D 638 / ISO R 527
Tensile strength at break (1)	10	MPa	ASTM D 638 / ISO R 527
Flexural modulus (1)	45	MPa	ASTM D 790 / ISO 178
Hardness Shore A (1)	93	-	ASTM D 2240

(1) On compression molded samples.

Packaging

LOTADER 5500 is commonly packed in 25 kg waterproof bags or 500 kg rigid containers with waterproof liner. It is recommended to reseal the bag or the liner after partial use to protect **LOTADER 5500** against moisture.

Security / Precautions of use

A safety data sheet as well as information on handling and storage of the **LOTADER 5500** are available close to your correspondent ARKEMA or on the site www.arkemagroup.com under heading FDS.

july 2005

The information contained in this document is based on trials carried out by our Research Centers and data selected from the literature, but shall in no event be held to constitute or imply any warranty, undertaking, express or implied commitment from our part. Our formal specifications define the limit of our commitment. No liability whatsoever can be accepted by Arkema with regard to the handling, processing or use of the products concerned which must in all cases be employed in accordance with all relevant laws and/or regulations in force in the country or countries concerned.



Technical Polymers Division
4/8, cours Michelet – La Défense 10
92800 Puteaux - France
www.arkemagroup.com

www.lotader.com