

# LOTADER<sup>®</sup> 2210

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## TERPOLYMER Ethylene – Acrylic Ester– Maleic Anhydride

### Description

**LOTADER 2210** is a random terpolymer of Ethylene, Acrylic Ester and Maleic Anhydride, polymerized by high pressure autoclave process.

### Main applications

**LOTADER 2210** is a versatile adhesive for extrusion, designed as a ready for use resin to be used pure. **LOTADER 2210** gives good bond strength in coextrusion of PE / Tie / PA structures. It is also use as a coupling agent in mineral filled compounds.

### Typical characteristics

Characteristics	Value	Unit	Test Method
Melt index (190°C / 2,16 kg)	3	g/10mn	ASTM D 1238
Butyl Acrylate Content	6	% wt	IRTF (internal)
Maleic Anhydride content	2.8	% wt	IRTF (internal)

### Main properties

- As an ethylene copolymer, **LOTADER 2210** 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 molten polymers in coextrusion. and to good interactions with mineral fillers (coupling agent).

## Processing

- Standard polyolefin extrusion equipment can be used for **LOTADER 2210**, which has the same processability as LDPE and is not corrosive.
- Heat stability of acrylate comonomers allows processing temperatures as high as for LDPE. Recommended melt temperatures has to be comprised between 180°C and 230°C.
- Purging **LOTADER 2210** 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	107	°C	DSC
Vicat softening point (1 kg)	80	°C	ASTM D 1525 / ISO 306
Elongation at break (1)	600	%	ASTM D 638 / ISO R 527
Tensile strength at break (1)	12	MPa	ASTM D 638 / ISO R 527
Flexural modulus (1)	120	MPa	ASTM D 790 / ISO 178
Hardness Shore D (1)	46	-	ASTM D 2240

(1) On compression molded samples.

## Packaging

**LOTADER 2210** 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 2210** against moisture.

## Security / Precautions of use

A safety data sheet as well as information on handling and storage of the **LOTADER 2210** are available close to your correspondent ARKEMA or on the site [www.arkemagroup.com](http://www.arkemagroup.com) under heading FDS.

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