

TERPOLYMER Ethylene – Acrylic Ester– Maleic Anhydride

Description

BONDINE[®] HX 8290 is a random terpolymer of Ethylene, Acrylic Ester and Maleic Anhydride, polymerized under high pressure in an autoclave process. This grade is characterised by a high fluidity.

Main applications

Due to its properties (reactivity, fluidity), **BONDINE[®] HX 8290** is an additive of choice for hot melt adhesives formulation.

Typical characteristics

Characteristics	Value	Unit	Test Method
Melt index (190°C / 2,16 kg)	70	g/10mn	ASTM D 1238
Ethyl Acrylate content	17	% wt	IRTF (internal)
Maleic Anhydride content	2.8	% wt	IRTF (internal)

Main properties

- Acrylic Ester brings some 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 (rubber, plastic films, paper, cardboard, aluminium foil, steel & glass) and good interactions with mineral fillers (coupling agent).
- As ethylene copolymer, **BONDINE[®] HX 8290** is compatible with LDPE in all proportions, and with almost all other ethylene copolymers.
- **BONDINE[®] HX 8290** is also compatible with tackifying resins and waxes. Combined with a high fluidity, it's a useful product for hot melt adhesives formulation.

Processing

- Heat stability of acrylate comonomers allows processing temperatures as high as for LDPE.
- **BONDINE® HX 8290** is not corrosive. However, to minimize the generation of gels, it is recommended to purge the equipment after a run is completed.

Physical properties

Characteristics	Value	Unit	Test Method
Density (23°C)	0.94	g/cm ³	ISO 1183
Melting point	85	°C	DSC
Vicat softening point (1 kg)	<40	°C	ASTM D 1525 / ISO 306
Elongation at break (1)	500	%	ASTM D 638 / ISO R 527
Tensile strength at break (1)	5.6	MPa	ASTM D 638 / ISO R 527
Flexural modulus (1)	30	MPa	ASTM D 790 / ISO 178
Hardness Shore A (1)	80	-	ASTM D 2240

(1) On compression molded samples.

Packaging

BONDINE® HX 8290 is commonly packed in 25 kg waterproof bags. It is recommended to reseal the bag after a partial use to protect **BONDINE® HX 8290** against moisture.

Security / Precautions of use

A safety data sheet as well as information on handling and storage of the **BONDINE® HX 8290** are available close to your correspondent ARKEMA or on the site www.arkema.com under heading FDS/MSDS.

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