ESCORENE™ ULTRA

Ethylene vinyl acetate copolymer

FL 00714

Product description

FL 00714 is a high ethylene vinyl acetate (EVA) extrusion coating grade with excellent heat sealing characteristics and is therefore mostly used as heat seal layer, i.e. :

- high speed heat sealing
- low temperature heat sealing
- good seal through contamination

However, the high vinyl acetate content reduces the use of FL 00714 to mostly non-food applications or food applications with no direct food contact. If food applications are wanted, it is recommended to use FL 00909.

FL 00714 is often used as a transparent surface protection layer taking full advantage of its excellent optical properties.

FL 00714 is stabilised with antioxidant.

Typical applications of FL 00714:

- General extrusion coating
- Co-extrusion coating
- Extrusion lamination
- All industrial coating applications which justify the use of an EVA : coating on kraft paper, aluminium foil, flexible films (PET, cellulose films,...).
- Compounding
- Hot melt adhesive
- Injection moulding

Recommended processing conditions

- Recommended melt temperature : 240 °C
- Maximum allowable temperature of the polymer : 250 °C
- Barrel temperature profile : 180/200/220/240 °C
- Minimum recommended air gap : 120 mm
- Recommended chill roll temperature : as low as possible (< 10 °C)

Due to the nature of EVA copolymers, a melt temperature of 250 °C should not be exceeded when using FL 00714.

Before starting with FL 00714, reduce the homopolymer LDPE temperature to a maximum melt temperature of 260 °C.

Prior to shut down of the extruder, all FL 00714 must be purged completely with LDPE homopolymer, with the deckles fully open.

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Food law status

Europe

These ethylene-vinyl acetate (EVA) copolymers can - in principle - be used for food contact applications in all European Member States. Contact is allowed with all types of food, provided the finished material or article meets the Overall Migration Limit as well as the Specific Migration Limit for vinyl acetate. In addition, the finished material or article should be technically suitable for the intended use and not unacceptably change the organoleptic characteristics of the food.

USA

The composition of these ethylene-vinyl acetate (EVA) copolymers complies with the FDA Code of Federal Regulations, 21 CFR 177.1350. Results of appropriate extraction tests on the specific final material or article, as required for the intended conditions of use (time, temperature and food type) according to 21 CFR 176.170(c) Tables 1 and 2, must be within the limits of 21 CFR 177.1350(b). In addition, the finished material or article must be technically suitable for the intended use.

These EVA copolymers also meet the FDA regulation 21 CFR 175.105 - “Adhesives”, for which the above mentioned restrictions do not apply.

Please contact your ExxonMobil Chemical representative for more detailed information and/or actual compliance certification documents for the specific EVA copolymer grade(s) of interest.

Typical properties

Resin properties	Test method (based on)	Units	Value
Melt index	ASTM D 1238	g/10 min	7.5
Vinyl acetate	ExxonMobil	wt %	14
Density	ASTM D 1928/1505	g/cm^3	0.935
Vicat softening point	ASTM D 1525	°C	62
Melting point	ASTM D 3418	°C	88
Neck-in (constant output)	ExxonMobil		
- 50 m/min, 245 °C		cm	8.8
- 150 m/min, 245 °C		cm	6.6
Minimum coating weight (constant output, 245 °C set)	ExxonMobil	g/m^2	15