

Westlake Center 2801 Post Oak Blvd. Suite 600 Houston, Texas 77056

# Product Data Sheet Epolene® C-16 Polymer

### Application/Uses

- Automotive
- Building and Construction
- Hot Melt Adhesives
- Packaging
- Solvent borne Adhesives
- Wax Modification

## **Key Attributes**

- Enhances paraffin wax coating properties like gloss, grease resistance, and MVTR
- Excellent thermal stability
- Maleic anhydride grafted PE provides functionality
- Medium molecular weight
- Useful in color concentrates

#### **Product Description**

Epolene C-16 is a branched low density polyethylene modified with maleic anhydride. It is useful as a base polymer for adhesives and coatings, color concentrate dispersions, and applications requiring compatibility with polyamide. Coatings produced with Epolene C-16 exhibit high gloss, low moisture vapor transmission rates, grease resistance, and good heat-seal ability. In hot melt adhesives, the maleic anhydride modification allows for improved adhesion, greater filler tolerance, broader capabilities, and improved aging properties.

# **Typical Properties**

Property	Test Method	Typical Value, Units
Polymer Type		Ma-PE
Acid Number (mg KOH/g)		2
Ring and Ball Softening Point	ASTM E 28	102°C
Penetration Hardness <sup>a</sup>	ASTM D 5	3 dmm

Viscosity, Brookfield	
@ 125°C (257°F)	16,650 cP
@ 190°C (374°F)	2,850 cP
Molecular Weight <sup>b</sup>	26,000

<sup>&</sup>lt;sup>a</sup> Needle under 100-g load for 5s @ 25 deg C, tenths of mm

#### Comments

Properties reported here are typical of average lots. Westlake makes no representation that the material in any particular shipment will conform exactly to the values given.

### Compatibility and Solubility

*Epolene* polymers are compatible with many polymers, resins, and natural and synthetic waxes.

# **Packaging**

Epolene C-16 polymer is supplied as free-flowing pellets, packaged in multiwall paper bags with a polyethylene coated inner liner [22.67 kg (50 lb) net weight]. The bags are palletized and stretch wrapped to prevent contamination during storage and shipment. Many Epolene polymers are also shipped in a variety of bulk containers.

Epolene C-16 polymer is also available in powder form as Epolene C-16P polymer.

# Storage

The useful life of this product can be affected by storage and handling conditions. When stored in the original unopened container in an enclosed area and protected from moisture, extreme temperatures and contamination, this product is estimated to continue to meet applicable sales specifications for more than 2 years from the date of manufacture. First in first out (FIFO) inventory control is recommended.

b Molecular weight measured via Gel Permeation Chromatography (GPC) using polystyrene standards