

# Technical Data Sheet

## Eastoflex™ E1003 Amorphous Polyolefin

### Applications

- Adhesives/sealants-b&c
- Asphalt
- Automotive protective coatings
- Carpet construction
- Case & carton sealing closings
- Film modification
- Labels non food contact
- Lubricants
- Packaging components non food contact
- Packaging tape
- Paints & coatings
- Polymer modification
- Road markings
- Roofing ingredients
- Specialty tape
- Tape non food contact
- Wax ingredients
- Wire/cable

### Key Attributes

- Broad compatibility with numerous elastomers, polymers, and other tackifying resins
- Broad temperature service range
- Excellent thermal and UV stability
- Excellent water and moisture resistance
- Low color
- Low odor

### Product Description

Eastoflex™ Amorphous Polyolefins (APOs) are characteristically saturated, low molecular weight, propylene-based olefin polymers. These products are inherently soft, tacky, and flexible, having a broad compatibility with numerous elastomers, polymers, and tackifying resins. Eastoflex™ APOs are characterized by consistent quality, low odor, good heat stability, and low color. Eastoflex™ E1003 is a copolymer of propylene and ethylene having a melt viscosity of 300 mPa·s at 190°C.

### Typical Properties

Property <sup>a</sup>	Test Method <sup>b</sup>	Typical Value, Units <sup>c</sup>
<b>General</b>		
Viscosity, Brookfield <sup>e</sup>	ASTM D 3236	300 cP
Ring and Ball Softening Point	ASTM E 28	120 °C (248 °F)
Glass Transition Temperature (T <sub>g</sub> )	ASTM D 3418	-30 °C (-22 °F)
Penetration Hardness	ASTM D 5	100 dmm
Color, Gardner		
Molten		1.0
Physical Form <sup>d</sup>		Molten/Solid

<sup>a</sup>Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

<sup>b</sup>Unless noted otherwise, the test method is ASTM.

<sup>c</sup>Units are in SI or US customary units.

<sup>d</sup>Molten available in tank trucks or railcars. Solid may be available in cylinders or drums.

<sup>e</sup>Viscosity, Brookfield @ 190°C

### Comments

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

## Compatibility and Solubility

Broad compatibility with numerous elastomers, polymers and tackifying resins. Eastoflex™ APOs have shown to be compatible with the following materials: aliphatic tackifying resins, asphalt, butyl rubber, hydrogenated tackifying resins, low density polyethylene, mineral oil, natural rubber, polybutene, polybutylene, polypropylene, polyterpene tackifying resins, and SEBS block copolymers.

## Packaging

### **Made to Order Package Types:**

Eastoflex™ E1003 can be packaged in drums. These are 22.5-inch inside diameter drums, 4 drums per pallet. Drummed material is sold by net weight per pallet, approximately 1,200 lb per pallet.

Eastoflex™ E1003 is available for blending with other APOs. Blends with E1003 and others APOs can allow for a more convenient product form.

Please be aware that there are additional costs and lead times associated with the made to order package types.

## Storage

Molten material should be handled entirely in closed systems blanketed with an inert gas, such as nitrogen. Molten material can be stored satisfactorily under nitrogen in a steel tank at 350°F to 390°F. Inside storage is recommended for Eastoflex™ APOs packaged in drums or cylinders.

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