

Regalflex™ E1045PL

Amorphous Polyolefin



Regalflex™ 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. Regalflex™ APOs are characterized by consistent quality, low odor, excellent heat stability, and low color. Regalflex™ E1045PL is a copolymer of propylene and ethylene, pelletized and coated with a polypropylene powder. It has a melt viscosity of 4,500 mPa·s at 190°C.

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

For further information regarding this product please refer to:

Synthomer Adhesive Technologies

eMail: Adhesive.Technologies@Synthomer.com

| Property | Typical Value | Unit | Method ¹ |
|--|---------------|------|--|
| Ring and Ball Softening Point | 140 | °C | ASTM E 28, RBSP of pellet coating on formulas ending in "PL" is 163°C. Pellet coating typically 1.5% to 2% by weight |
| Gardner Color, Molten | 1.0 | | |
| Penetration Hardness | 40 | dmm | ASTM D 5 |
| Glass Transition Temperature, T _g | -22 | °C | ASTM D 3418 |
| Melt Viscosity at 190°C | 4500 | cP | ASTM D 3236, Brookfield |
| Physical Form | Pellets | | |

¹ internal method based upon the specified norm

Applications

Caulks and Sealants, Asphalt and Road Construction, Automotive, Carpet, Packaging, Film Modification, Hygiene Adhesives, Labels, Tapes, Other coatings, Plastic Modification, Roadmarking, Roofing, Specialty Tapes, Wax Modification, Wire and cable

Compatibility and Solubility

Broad compatibility with numerous elastomers, polymers and tackifying resins. Regalflex™ APOs have shown compatibility 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

Regalflex™ E1045PL is available in bags of 50-lb net weight (22.7 kg). Pallet of bags of 2,250-lb net weight (1020.6 kg). Bags are made of polypropylene.

Pellets are coated with polypropylene to minimize blocking.

Storage

Due to the thermoplastic behavior, pelletized material may fuse, block or lump. This can be accelerated under any of the following conditions: 1) above ambient temperature, 2) prolonged storage, 3) pressure, e.g., stacking pallets, or a combination of these conditions.

For improved handling, we therefore recommend storing the material in a temperature-controlled area, be careful with stacking material or

Regalflex™ E1045PL

Amorphous Polyolefin



applying pressure and preventing prolonged storage. It is recommended that control of inventory be observed at all times, taking care that the oldest material is used first.

It should be noted that lumping does not have a negative impact on the product specifications. Due to the nature of the product, claims regarding lumping cannot be accepted.

Based on stability testing conducted on comparable polymer samples, and available information from past experience, when stored in the original unopened container in an enclosed area, protected from moisture, extreme temperatures and contamination, Regalflex™ Amorphous Polyolefin should continue to meet applicable sales specifications for 4 years from the date of manufacture. The exact useful life of this product can be affected by such things as storage and handling conditions and the conditions relating to past experiences may not be representative of your specific product storage and handling conditions. As a user of this product, you should be guided by your own determination that your use of the product is safe, lawful, and technically suitable in your intended applications. First in first out inventory control is recommended. Refer to the Safety Data Sheet for available health, safety, storage and handling information.

Comments

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