EASTMAN

Technical Data Sheet

Dymerex™ Polymerized Rosin

Applications

- Adhesives/sealants-b&c
- Bookbinding
- Caps & lids non-food contact
- Carpet construction
- Case & carton sealing closings
- Commerical printing inks
- Film modification
- Labels non food contact
- Packaging component films
- Packaging components non food contact
- Packaging tape
- Paints & coatings
- Polymer modification
- Protective coatings
- Road markings
- Roofing ingredients
- Solder flux
- Specialty tape
- Tape non food contact
- Tires
- Wax ingredients
- Wire/cable

Key Attributes

- Alcohol-soluble
- Non-crystalline
- Resistant to oxidation
- Thermoplastic rosin acid
- Very high softening point

Product Description

Dymerex™ modified rosin is a pale, acidic, thermoplastic, high softening point resin. It is composed predominately of dimeric acids derived from rosin with lesser amounts of monomeric resin acids and neutral materials of rosin origin. Dymerex™ modified resin has high resistance to oxidation and does not crystallize from solutions or from solid compositions. It is compatible with many natural and synthetic film formers and rubbers. Being an acidic resin, it reacts readily with polyalcohols or hydrated lime to yield high melting derivatives.

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
General		
Ring and Ball Softening Point	ASTM E 28	144 °C
Color, Gardner[d]		9
Color, USRG Rosin Scale		N
Acid Number (mg KOH/g)		145
Molecular Weight Distribution[e]		
M_n		412
M_w		487
M_w/M_n		1.18
M_z		582
Melt Viscosity, Brookfield Thermosel		
@ 150°C		153,000 cP
@ 170°C		7,000 cP
@ 190°C		740 cP
@ 210°C		145 cP
Density		

@ 20°C	1.069 kg/L
Description, Base Resin	Dimerized Gum Rosin

[a]*Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*
[b]*Unless noted otherwise, the test method is ASTM.*
[c]*Units are in SI or US customary units.*
[d]*50% resins solids in toluene or xylene*
[e]*Molecular weight measured via Gel Permeation Chromatography (GPC) using polystyrene standards*

Compatibility and Solubility

Compatible with ethylcellulose, natural rubber, SBR (styrene-butadiene), polychloroprene, drying oils, alkyd resins, shellac, low molecular weight polyethylene, paraffin and microcrystalline waxes.

Soluble in aromatic, aliphatic and chlorinated hydrocarbons, esters, ketones, and higher molecular weight alcohols. Insoluble in methanol, ethanol, isopropanol and water.

Packaging

Dymerex™ Polymerized Rosin is packed in aluminum-kraft-bags of 25 kg net, and supplied on shrink-wrapped pallets of 28 bags each.

Storage

Because of the extremely large surface area they present, flaked forms of resins are prone to gradual oxidation, some more so than others. This could result in darkening and/or it could have an adverse effect on solubility in organic solvents. It is strongly recommended that strict control of inventory be observed at all times, taking care that the oldest materials is used first.

Dymerex™ Polymerized Rosin material will remain within product specification limit for a period of at least 18 months after shipment from Eastman's production facilities, provided storage conditions outlined in this data sheet are observed. However, as we can neither anticipate the conditions under which the resin is processed nor the end use applications for which it is used, we recommend that the material be tested upon receipt.

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