TECHNICAL DATA SHEET

Poly-Pale™ Partially Dimerized Rosin

Poly-Pale™ resin is a pale, partially polymerized (dimerized) gum rosin. Compared with pale grades of regular wood, gum, or tall oil rosins, it has a higher softening point, higher viscosity (molten and in solution), much greater resistance to oxidation, and complete freedom from crystallizing when in solid form or in solution. Its many uses include the preparation of varnishes, driers, synthetic resins, ink vehicles, floor tile, rubber compounds, solder fluxes, and various adhesives and protective coatings.

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

For further information regarding this product please refer to:

Synthomer Adhesive Technologies

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Property	Typical Value	Unit	Method[1]
Description, Base Resin	Partially Dimerized Gum Rosin		
Ring and Ball Softening Point	103	°C	ASTM E 28
Color, Gardner	8		50% solids in toluene
Color, USRG Rosin Scale	WW		neat
Acid Number (mg KOH/g)	146	mg KOH/g	
Density at 20°C	1.069	kg/L	
Molecular Weight Distribution, Mn	313		
Molecular Weight Distribution, Mw	353		
Molecular Weight Distribution, Mz	422		
Molecular Weight Distribution, Mw/Mn	1.13		
Melt Viscosity, Brookfield Thermosel at 100°C	100,800	cP	
Melt Viscosity, Brookfield Thermosel at 120°C	4100	cP	
Melt Viscosity, Brookfield Thermosel at 140°C	400	cP	
Melt Viscosity, Brookfield Thermosel at 160°C	100	cP	
Melt Viscosity, Brookfield Thermosel at 180°C	33	cP	

[1] internal method based upon the specified norm

Applications

Adhesives, Caulks and Sealants, Assembly, Packaging specialities, Carpet, Packaging, Graphic inks, Film Modification, Labels, Tapes, Other coatings, Plastic Modification, Roadmarking, Roofing, Other adhesives , Tire components, Wax Modification, Wire and cable

Compatibility and Solubility

Compatible with ethylcellulose, natural rubber, SBR (styrene-butadiene), polychloroprene, EVA (ethylene-vinyl acetate) copolymers, 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

Packaged 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, flaked forms of resins are prone to gradual oxidation, some more so than others. This could result in darkening and /or 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 material is used first. Recommended storage is in original packaging, dry, free from contamination, below 30°C.
Flaked forms of low to medium-softening point resins may fuse, block, or lump:
(1) during hot-weather months,
(2) if stored near steam pipes or other sources of heat, and
(3) upon prolonged storage and compression.

Poly-Pale™ Partially Dimerized Rosin shelf-life for bag packaging is 18 months from production date; and the shelf-life of drum packaging is 18 months from production date, provided recommended storage conditions are observed.