

Abitol™ E Hydroabietyl Alcohol

Abitol™ E resin hydroabietyl alcohol is a colorless, tacky, balsamic resin. Its tackiness and extremely pale color, combined with its solubility in common organic solvents and compatibility with resins, film-formers, and oils, have led to its use as a resinous plasticizer and/or tackifier in plastics, lacquers, inks and adhesives. Chemically, Abitol E resin is a high molecular weight, primary, monohydric alcohol derived from rosin acids that have been hydrogenated to reduce unsaturation. Abitol E resin undergoes the general types of chemical reaction common to most primary alcohols.

- Alcohol-soluble
- High refractive index
- High viscous tackifier resin with excellent ageing characteristics
- Light color
- Low odor
- Reactive functionality
- Wide solubility and compatibility range

Property	Typical Value	Unit	Method ¹
Description, Base Resin	Hydrogenated Gum Rosin		
Ring and Ball Softening Point	Liquid		ASTM E 28
Color, Hunterlab b	2.5		50% solids in toluene
Acid Number	0.1	mg KOH/g	ASTM D 465
Hydroxyl Number	4.7	%	
Saponification Number	22	mg KOH/g	Rosin based
Hydroabietyl Alcohol	81	%	
Refractive Index at 100°C	1.4950		
Refractive Index at 20°C	1.5245		
Specific Gravity at 25°C	1.008		
Melt Viscosity at 50°C	6500	cP	Brookfield
Melt Viscosity at 60°C	1500	cP	
Melt Viscosity at 80°C	160	cP	

¹ internal method based upon the specified norm

Applications

Caulks and Sealants, Roadmarking, Packaging specialities, Carpet, Additives, Packaging Inks, Correction fluids, Labels, Tapes, Protective films, Asphalt and Road Construction, Waterproofings, Other adhesives , Speciality tapes, Metal coatings

Compatibility and Solubility

Compatible at all ratios, or in limited but practically useful proportions, with nitrocellulose, ethylcellulose, melamine- and urea-

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formaldehyde resins, polyethylene, shellac and carnauba wax. Limited compatibility with casein, polymethyl methacrylate, polyvinyl acetate chloride, polyvinyl butyral, natural rubber, synthetic rubber. Incompatible with cellulose acetate, cellulose acetate butyrate, polystyrene and zein.

Soluble in alcohols, esters, ketones, chlorinated solvents, and aliphatic, aromatic, or terpene hydrocarbons. Insoluble in water. Solubility parameters, 50% resin concentration: 7,0-10,6 in Class I solvents - weakly hydrogen-bonded; 7,4-11,3 in Class II solvents - moderately hydrogen-bonded; 9,5-14,5 in Class III solvents - strongly hydrogen-bonded.

Packaging

Abitol™ E resin hydroabietyl alcohol is supplied in 190 kg open-head steel drums, on pallets containing 4 drums each, from Synthomer production facilities in the Netherlands and from warehouses located in Europe.

Storage

Inside storage and "first in first out" inventory control is recommended. Storage at temperatures above 30°C should be avoided. 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 the solubility of the resin in organic solvents or on its compatibility with polymers. Accordingly, it is recommended that strict control of inventory be observed at all times, taking care that the oldest material is used first.

Abitol™ E resin hydroabietyl alcohol material will remain within product specification limit for a period of at least twelve months after shipment from Synthomer's production facilities in the Netherlands, 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.

Comments

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