TECHNICAL DATA SHEET

Piccotac™ 1100 Hydrocarbon Resin

PICCOTAC™ 1100 hydrocarbon resin is a 100°C softening point, thermoplastic, moderate molecular weight, aliphatic C5 resin. Derived largely from mixed monomers of petroleum origin, it is characterized by its light color, excellent balance of tack and of adhesive and cohesive properties, heat resistance, and wide compatibility and solubility. It is designed as a reinforcing tackifier for use in NR and IR-based pressure sensitive adhesives and SBC-based hot melt adhesives, for polymer modifications and for coatings. PICCOTAC™ 1100 is stabilized by addition of antioxidant.

- Aliphatic C5 resin
- Excellent adhesion in formulations with styrene-isoprene-styrene (SIS) block copolymers
- Excellent color and color stability
- Excellent shear strength
- Good balance of tack & peel properties

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	101	°C	ASTM E 28
Color, Gardner	2		ASTM D 6166, 50% solids in toluene
MMAP cloud point	98	°C	from 1:2 mixture of methylcyclohexane and aniline
DACP cloud point	62	°C	from 1:1 mixture of xylene and diacetone alcohol
Molecular Weight , Mn	1160	g/mol	GPC using polystyrene standards, elution with THF
Molecular Weight, Mw	2860	g/mol	
Molecular Weight, Mz	8050	g/mol	
Polydispersity (Mw/Mn)	2.8		
Melt Viscosity at 135°C	1000	poise	Brookfield
Melt Viscosity at 135°C	100	poise	
Melt Viscosity at 170°C	10	poise	
Glass Transition Temperature (Tg-midpoint)	46	°C	DSC, 20°C/minute

[1] internal method based upon the specified norm

Applications

Carpet, Caulks and Sealants, Labels, Other coatings, Packaging, Plastic Modification, Roadmarking, Roofing, Specialty Tapes, Tapes, Wax Modification, Wire & Cable, Adhesives

Packaging

Pastilles, in multi-wall paper bags (50 lbs, 22. 7 kg, net wt); 2000 lb sacks. Also available in molten rail cars (160k lbs/truck) and molten tank trucks (42 k lbs/truck).

Compatibility and Solubility

Compatible at all ratios or in limited but practically useful proportions, with natural and synthetic rubbers, low-vinyl acetate EVA (ethylene-vinyl acetate) copolymers, EnBA (ethylene n-butyl acetate) copolymers, APAO (amorphous poly-alpha-olefins), SIS (styrene-isoprene-styrene) block copolymers, SIBS (styrene-isoprene/butadiene-styrene) block copolymers, SEBS (styrene-ethylene/butylene-styrene) block copolymers, SEPS (styrene-ethylene/propylene-styrene) block copolymers, polyethylene polymers, polypropylene polymers, paraffin and microcrystalline waxes, PIB (polyisobutene), EPDM (ethylene propylene diene terpolymer) type rubbers, OBC (olefinic block copolymers), mPE (metallocene-catalyzed polyethylene), mPP (metallocene-catalyzed polypropylene), and TPE (thermoplastic elastomers).
Soluble at all useful proportions in aliphatic, aromatic, and chlorinated hydrocarbons and t-butyl acetate. Insoluble in alcohols and water.

Storage

Due to the thermoplastic behavior, pastillated and flaked resins 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. This is particularly applicable for low softening point resin grades. In order to maintain the flake or pastille shape, we therefore recommend storing the material in a temperature-controlled area; be careful with stacking material or applying pressure and preventing prolonged storage. 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.

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.

The useful life of this product can be affected by storage and handling conditions. When stored in the original unopened container in an enclosed area and protected from moisture, extreme temperatures and contamination, the shelf life of this product is estimated to continue to meet applicable sales specifications for two years from the date of manufacture. Shelf life is a guide not an absolute value. The product should be reanalyzed for critical properties at the end of its shelf life to see if it meets specification for use.

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.