

Piccotac™ 1105-E

Hydrocarbon Resin

PICCOTAC™ 1105-E hydrocarbon resin is a low molecular weight, aliphatic hydrocarbon resin, derived mainly from dienes and other reactive olefin monomers. This pale-colored, neutral resin is characterized by its tack and tack retention, excellent binding properties, high resistance to moisture, UV stability, and good compatibility and solubility. It is used as a binder in hotmelt road markings, hot-melt coatings, waterproofing compositions, and paints and varnishes, and is particularly suitable as tackifier resin in rubber-compounding applications. PICCOTAC™ 1105-E is stabilized by addition of antioxidant.

- Excellent compatibility with natural rubber and APO
- High molecular weight increases cohesion

For further information regarding this product please refer to:

Synthomer Adhesive Technologies

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Property	Typical Value	Unit	Method ¹
Ring and Ball Softening Point	101	°C	ASTM E 28
Color, Gardner	4		ASTM D 6166, 50% solids in toluene
MMAP cloud point	98	°C	from 1:2 mixture of methylcyclohexane and aniline
DACP cloud point	57	°C	from 1:1 mixture of xylene and diacetone alcohol
Molecular Weight, Mn	1280	g/mol	GPC using polystyrene standards, elution with THF
Molecular Weight, Mw	3230	g/mol	
Molecular Weight, Mz	9200	g/mol	
Polydispersity (Mw/Mn)	2.5		
Melt Viscosity at 140°C	7000	cP	Brookfield
Melt Viscosity at 160°C	1600	cP	
Melt Viscosity at 180°C	450	cP	
Density at 25°C	0.97	kg/dm ³	
Glass transition temperature (Tg-midpoint)	45	°C	DSC, 20°C/minute

¹ internal method based upon the specified norm

Applications

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

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), 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.

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Packaging

PICCOTAC™ 1105-E hydrocarbon resin is pastillated and packed in polyethylene bags of 20 kg net, and supplied on shrink wrapped pallets of 50 bags (1000 kg) each, from Synthomer facilities in the Netherlands and from warehouses located in Europe.

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.

Piccotac™ 1105-E hydrocarbon resin material will remain within product specification limits for a period of at least twelve months after shipment from Synthomer 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.