EASTMAN

Technical Data Sheet

Piccotac™ 1100-E Hydrocarbon Resin

Applications

- Adhesives/sealants-b&c
- Carpet construction
- Case & carton sealing closings
- Casting wax
- Labels non food contact
- Packaging tape
- Paints & coatings
- Polymer modification
- Protective coatings
- Road markings
- Roofing ingredients
- Specialty tape
- Tape non food contact
- Tires
- Wax ingredients
- Wire/cable

Key Attributes

- Aliphatic C5 resin
- Excellent adhesion to natural rubber based adhesives
- Excellent color and color stability
- Excellent peel and tack properties
- Limited compatibility with styrene-isoprene-styrene (SIS) block copolymers

Product Description

Piccotac™ 1100-E Hydrocarbon Resin is a low molecular weight, aliphatic hydrocarbon resin, derived mainly from dienes and other reactive monomers. It is characterized by its light color, excellent balance of shear strength and of adhesive and cohesive properties, heat resistance, and wide compatibility. Piccotac™ 1100-E Hydrocarbon Resin is designed as a tackifier for various adhesive and hot-melt compositions, particularly pressure-sensitive systems that require high cohesive and quick-stick properties.

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
General		
Ring and Ball Softening Point	ASTM E 28	99 °C
Color, Gardner[d]	ASTM D 6166	5
Cloud Point[f]		
MMAP		97 °C
Molecular Weight[e]		
M_n		1275
M_w		2750
M_w/M_n		2.2
M_z		6700
Density		
@ 25°C		0.975 kg/dm^3

[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% in toluene.*
[e] *Molecular weight, z-average from gel permeation chromatography, elution with THF.*
[f] *Cloud point temperature from 2:1 Vol:Vol aniline-methylcyclohexane, Eastman method.*

Compatibility and Solubility

Light color and color stability; heat resistance; excellent hot tack and fast set; and wide compatibility.

Compatible at all ratios, or in limited but practically useful proportions, with natural and synthetic rubbers, polyolefins, paraffin and microcrystalline waxes, and low-VA EVA resins (ethylene-vinyl acetate copolymers).

Soluble in aliphatic, aromatic and chlorinated hydrocarbons and methyl isobutyl ketone (MIBK). Insoluble in glycols, lower alcohols and water.

Solubility Parameters, 20% resin concentration. 6,8-9,7 in Class I solvents - weakly hydrogen-bonded; 6,7-9,8 in Class II solvents - moderately hydrogen-bonded; 6,8-9,5 in Class III solvents - strongly hydrogen bonded.

Packaging

Piccotac™ 1100-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 Eastman 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™ 1100-E Hydrocarbon Resin material will remain within product specification limits, as mentioned under the heading "Product Specifications", for a period of at least twelve months after shipment from Eastman 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.

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