EASTMAN

Technical Data Sheet

Picco™ A-120 Hydrocarbon Resin

Applications

- Adhesives/sealants-b&c
- Bookbinding
- Carpet construction
- Case & carton sealing closings
- Commerical printing inks
- Lithographic printing inks
- Packaging tape
- Paints & coatings
- Polymer modification
- Protective coatings
- Road asphalt
- Roofing
- Solder flux
- Specialty tape
- Tape non food contact
- Wire/cable

Key Attributes

- Excellent pigment wetting
- Excellent resistance to acids, alkalis and moisture
- Non-reactive
- Thermoplastic

Product Description

Picco™ A-120 Hydrocarbon Resin is a low molecular weight, amber colored thermoplastic resin produced from petroleum-derived monomers. Being non-polar, it is characterized by its excellent resistance to acids, alkalies and moisture. It shows good color stability and, when formulated with elastomers, a good balance of flex, tear, tack and adhesion properties.

This resin is particularly indicated as processing and reinforcing agent in rubber compounds and as binder in protective coatings.

Picco™ A-120 Hydrocarbon Resin is polymerized under conditions that control its softening point within a narrow range

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
General		
Ring and Ball Softening Point	ASTM E 28	124 °C
Color, Gardner[e]	ASTM D 6166	7
Density		
@ 25°C		1.08 kg/dm^3
Molecular Weight[f]		
M_n		750
M_w		1300
M_w/M_n		1.7
M_z		2400
Viscosity[d]		
@ 23°C	Haake C&P	9 Pa.s

[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]*56% in Halterman Test Oil 6/9*
[e]*50% in toluene.*
[f]*Molecular weight, z-average from gel permeation chromatography, elution with THF.*

Compatibility and Solubility

Picco™ A-120 Hydrocarbon Resin has excellent solvent release, tack and tack retention; wide solubility and compatibility; and good resistance to oxygen and UV light. Also, it is extremely water repellent, provides excellent pigment wetting, and can be used with both reinforcing and non-reinforcing fillers.

Picco™ A-120 Hydrocarbon Resin is a viscous fluid at rubber-milling temperatures, and aids compounding by reducing viscosity and by adding tack while on the rolls. These advantages, combined with improvement in mold flow during cure, are obtained without lowering the cured hardness of the finished product.

Compatible at all ratios, or in limited but practically useful proportions, with SBR, rosin, modified rosins and rosin esters, alkyds and drying oils, polar elastomers, epoxy resins, and chlorinated rubber, and limited compatible with EVA (ethylene-vinyl acetate) copolymers.

Soluble at all useful proportions in aromatic, aliphatic, and chlorinated hydrocarbons; ink oils; benzyl alcohol; cyclohexanol; methyl ethyl ketone; esters; natural oils and fats. Insoluble in lower alcohols, acetone, and ethylene glycol.

Packaging

Picco™ A-120 Hydrocarbon Resin is pastillated and packed in polyethylene bags of 25 kg net, and supplied on shrink-wrapped pallets of 40 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.

Picco™ A120 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.
