

**Product Data Sheet****Piccotac 1104 (C9) Hydrocarbon Resin  
(testing grade)****Application/Uses**

- Assembly
- Contact Adhesives
- Hot Melt Adhesives

**Key Attributes**

- Increase the gloss of paint
- Low molecular weight

**Product Description**

*Piccotac 1104 Hydrocarbon Resin is a low molecular weight, aromatic hydrocarbon resin, derived mainly from dienes and other reactive olefin monomers. This light 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 in rubber synthetic, tire, hot-melt adhesives, and paints and varnishes, and can improve pairing performance.*

**Typical Properties**

Ring and Ball Softening Point	ASTM E 28	140°C
Color, Gardner <sup>a</sup>		7
Cloud Point <sup>b</sup>		
MMAp		97°C
DACP		57°C
Molecular Weight <sup>c</sup>		
		6800
		2200
		1000
		2:8
Density @ 25°C		0.95
Melt Viscosity		
@ 120°C		6000 cP
@ 150°C		1500 cP
@ 170°C		400 cP

**Compatibility and Solubility**

Compatible at all ratios, or in limited but practically useful proportions with terpene resins, rosin and modified rosins, rosin esters, paraffin and microcrystalline waxes, coumarone-indene resins, polyethylene and polypropylene, natural, butyl, isoprene, and reclaimed rubbers, high-ethylene EVA resins, linseed, soybean and mineral oils. Soluble in aliphatic, aromatic and chlorinated hydrocarbons and in ethyl ether. Insoluble in alcohols, ketones and glycols.

**Packaging**

*Piccotac 1104 Hydrocarbon Resin is pastillated and packed in polyethylene bags of 20 kg net,*

**PRODUCT NAME****Picco™ 2215****SPECIFICATIONS**

PROPERTY	LIMITS	TEST METHOD
Softening Point, Ring & Ball °C	108 – 118	CASPI-A-AN-G-PP-085 \ ASTM E-28
Color, Gardner, 50% in Toluene	12 Max	CASPI-A-AN-G-AC-100 \ ASTM D-1544

**References:**

NOTE: This product was previously known as Piccodiene® 2215.

NOTE: 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.

## Product Data Sheet

### Picco™ 2215 Hydrocarbon Resin

#### Application/Uses

- Building and Construction
- Caulks and Sealants
- Contact Adhesives
- Footwear and Leather
- Graphic Arts
- Hot Melt Adhesives
- Packaging
- Solventborne Adhesives

#### Key Attributes

- Brittle thermoplastic flaked or pastillated solid
- Dark color
- Resistant to acid, alkali, and water

#### Product Description

Picco™ 2215 hydrocarbon resin is a low molecular weight, dark amber colored thermoplastic resin produced from petroleum derived aromatic and cycloaliphatic monomers. Picco™ 2215 hydrocarbon resin is characterized by its resistance to acid, alkalis, and moisture. Picco™ 2215 hydrocarbon resin is suggested for use in paints, varnishes, concrete curing compounds, printing inks, and adhesives. It is particularly suitable as a modifier and processing aid in rubber compounding.

#### Typical Properties

Property	Test Method	Typical Value, Units
Ring and Ball Softening Point	ASTM E 28	113°C
Color, Gardner <sup>a</sup>		12
Density		1.14 g/cc
Cloud Point <sup>b</sup>		
MMAp		45°C
DACP		49°C
OMS		95/87°C
Molecular Weight <sup>c</sup>		
M <sub>z</sub>		3500
M <sub>w</sub>		1300
M <sub>n</sub>		450
M <sub>w</sub> / M <sub>n</sub>		2.8

b MMAP: cloud point measured in a 1:2 mixture of methylcyclohexane and aniline; DACP: cloud point measured in a 1:1 mixture of xylene and 4-methyl-2-pentanone; OMS: odorless mineral spirits cloud point; For more information see "Hydrocarbon Spectrum", WA-86

c Molecular weight measured via Gel Permeation Chromatography (GPC) using polystyrene standards

d Midpoint

## Comments

PICCO 2215 Hydrocarbon Resin is stabilized with an antioxidant.

## Compatibility and Solubility

Picco™ 2215 hydrocarbon resin is characterized by a dark amber color; a mild aromatic hydrocarbon odor, high gloss and gloss promotion; acid, alkali, and water resistance; fast solvent release; mar and shock resistance; and low solution viscosity. It compatible at useful levels with natural, styrene-butadiene (SBR), and polychloroprene rubber; ethylene-vinyl acetate copolymers with less than 20% vinyl acetate, chlorinated paraffin; rosin and modified rosins; rosin esters, polyesters, acrylics and medium and long drying oils. Picco™ 2215 is not compatible with all grades of these polymers at all ratios and the acceptability of a particular blend should be verified before use. Picco™ 2215 is soluble in most aliphatic, aromatic, and chlorinated hydrocarbons and marginally soluble in low KB mineral spirits. Picco™ 2215 is insoluble in alcohols, glycols, ketones, and water.

## Packaging

Flake or pastillates in multi-wall kraft bags (50 lbs, 22.7 kg new wt) stacked 40 bags per pallet.

## Storage

Flaked or pastillated forms of resin may fuse, block, or lump during hot weather, if stored near steam pipes or other sources of heat, and if stored for prolonged periods. Because of the extremely large surface area they present, flaked and pastillated forms of resin are prone to gradual oxidation, some more so than others. This could result in darkening and/or it could have an adverse effect on solubility of the resin in organic solvents. Accordingly, it is strongly recommended that strict control of inventory be observed at all times, taking care that the oldest material is used first.

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**Supplier: Eastman Chemical Company****Product performance:**

Hydrocarbon resin. Low molecular weight, nonpolar, amber colored thermoplastic resin produced from petroleum derived monomer. Characterized by its excellent resistance to acids, alkalis, good initial color and color stability, and a good balance of flex, tear, tack, and adhesion properties. Possesses excellent solvent release, tack, and tack retention, wide solubility and compatibility, and good resistance to oxygen and UV light. Compatible in useful proportions with styrene-butadiene rubber (SBR), rosin, modified rosins and esters, alkyds and drying oils, polar elastomers, epoxy resins, chlorinated rubber, and chlorinated paraffin.

**Applications / Recommended for:**

- ADHESIVES
- Ethylene Co-terpolymers - Solids (EVA, EMA)
- Aminoplastes / Phenoplastes (UF, MUF)
- Epoxies (EP)
- Synthetic Rubbers

TYPICAL PROPERTIES	VALUE	UNIT
Cloud point, MMAP	37	°C
Cloud point, DACP	-45	°C
Melt viscosity, 10 poises	140	°C
Melt viscosity, 100 poises	115	°C
Melt viscosity, 1000 poises	105	°C
Density @ 25°C	1.04	kg/L
Molecular weight, Mn	700	
Cloud point, OMS (initial)	85	°C

**PRODUCT NAME****Picco™ 6100****SPECIFICATIONS**

<b>PROPERTY</b>	<b>LIMITS</b>	<b>TEST METHOD</b>
Softening Point, °C, Ring & Ball	98 – 108	CASPI-A-AN-G-PP-085 \ ASTM E-28
Color, Gardner, 50% in Toluene	14 Max	CASPI-A-AN-G-AC-100 \ ASTM D-1544

**References:**

**NOTE:** 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.

## Product Data Sheet

### Picco™ 6100 Hydrocarbon Resin

#### Application/Uses

- Building and Construction
- Caulks and Sealants
- Contact Adhesives
- Footwear and Leather
- Graphic Arts
- Hot Melt Adhesives
- Packaging
- Solventborne Adhesives

#### Key Attributes

- Brittle thermoplastic flaked or pastillated solid
- Dark color
- Resistant to acid, alkali, and water

#### Product Description

Picco™ 6100 hydrocarbon resin is the lowest softening point product in the series of low molecular weight, non-polar, amber colored thermoplastic resins produced from petroleum derived aromatic monomers. It is suggested for use in elastomers, for production of economical pressure-sensitive adhesives, mastics and sealants based on styrene-butadiene rubber where color and heat stability are not critical, contact adhesive based on polychloroprene rubber, printing inks, paint and varnish, or as a processing aid in compounding of rubber. It can also be used as an endblock modifying resin for styrenic block copolymers to reduce melt viscosity while maintaining or improving shear resistance at or below 40°C in applications where color and heat stability are not critical.

#### Typical Properties

Property	Test Method	Typical Value, Units
Ring and Ball Softening Point	ASTM E 28	104°C
Color, Gardner <sup>a</sup>		11
Density		1.02 g/cc
Cloud Point <sup>b</sup>		
MMAp		30°C
DACP		10°C
OMS		75/58°C
Molecular Weight <sup>c</sup>		
M <sub>z</sub>		5300
M <sub>w</sub>		1800
M <sub>n</sub>		550
M <sub>w</sub> /M <sub>n</sub>		3.3
Glass Transition Temperature (T <sub>g</sub> ) <sup>d</sup>		46°C

## Soft Viscosity

10 poise	167°C
100 poise	141°C
1000 poise	118°C

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<sup>a</sup> 50% resins solids in toluene

<sup>b</sup> MMAP: cloud point measured in a 1:2 mixture of methylcyclohexane and aniline; DACP: cloud point measured in a 1:1 mixture of xylene and 4-methyl-2-pentanone; OMS: odorless mineral spirits cloud point; For more information see "Hydrocarbon Spectrum", WA-86

<sup>c</sup> Molecular weight measured via Gel Permeation Chromatography (GPC) using polystyrene standards

<sup>d</sup> midpoint

## Comments

PICCO 6100 Hydrocarbon Resin is stabilized with an antioxidant.

## Compatibility and Solubility

Picco™ 6100 hydrocarbon resin is characterized by acid, alkali and water resistance; dark amber color; and a good balance of tack, adhesion, flex and tear properties when compounded with an appropriate elastomer. Picco™ 6100 is compatible in useful proportions with styrene-butadiene rubber (SBR), the polystyrene portions of styrenic block copolymers, rosin, modified rosins and rosin esters, alkyds and drying oils, ethylene-vinyl acetate copolymers with up to 28% vinyl acetate, epoxy resins, and chlorinated rubber. Picco™ 6100 is not compatible with all grades of these polymers at all ratios and the acceptability of a particular blend should be verified before use. It is soluble in aromatic, aliphatic, and chlorinated hydrocarbons; low kauri-butanol (KB) aliphatic ink oils; benzyl alcohol; cyclohexanol; methyl ethyl ketone. Picco™ 6100 is insoluble in lower alcohols, acetone, and ethylene glycol.

## Packaging

Flake or pastillates in multi-wall kraft bags (50 lbs, 22.7 kg new wt) stacked 40 bags per pallet.

## Storage

Flaked or pastillated forms of resin may fuse, block, or lump during hot weather, if stored near steam pipes or other sources of heat, and if stored for prolonged periods. Because of the extremely large surface area they present, flaked and pastillated forms of resin are prone to gradual oxidation, some more so than others. This could result in darkening and/or it could have an adverse effect on solubility of the resin in organic solvents. Accordingly, it is strongly recommended that strict control of inventory be observed at all times, taking care that the oldest material is used first.

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Item					
Grade	Softening Point °C	Color G. No	Proportion	Iodine Value g/ 100g	Acid Value MgKOH/g
M-510	110	3	1.1	180	< 0.1

本表數據為代表值，僅供選擇品級用途之參考

The details given in this data sheet are our standard value but not specification guaranteed.