

### **RESIN OIL 80**

Complex mixture of (mainly unsaturated) C9 – C12 hydrocarbons.

#### **General**

RESIN OIL 80 is a mixture of (mainly unsaturated) C9 and C12 components rich in dicyclopentadiene, indene and methylstyrenes (vinyltoluenes). It originates from high temperature cracking of petroleum fractions and is separated by distillation during the production of Benzene out of Pyrolysis Gasoline.

RESIN OIL 80 is used to produce hydrocarbon resins. Major applications of these resins are in printing inks, hot melt pressure sensitive adhesives, rubber, paints, varnishes and road marking paints. Furthermore, the resins can be used in concrete curing additives, sealings, floor-tiles, foundry core binding and for paper sizing.

#### **Available Grades**

**RESIN OIL 80** 

- One grade is available

## Physical Properties

RESIN OIL 80 is a clear, yellow liquid with a strong aromatic or camphor like odor. Because it consists of a great variety of components it has no clear freezing point or boiling point, but freezing and boiling ranges. The products are immiscible / insoluble in water. The material originates from petroleum cracker operations, hence as supplied is low in sulfur.

The tables below summarize product typical properties and typical compositions are given.

# Product Typical Properties

Test Item	RESIN OIL 80
Color (Gardner)	6
Specific Gravity (60 °F)	0.94 – 0.97
Vapor Pressure (68 °F)	0.58 psi
Relative Vapor Density (air=1)	2
Flash Point (°C)	>35
Pour Point (°C)	-15
Boiling Point (°C)	80 – 200
Auto Ignition temp (°C, in air)	500
Water (ppm)	150
Sulphur (ppm)	100
Odor	Strong Camphorous / Aromatic
Appearance	Clear and yellow liquid

Note 1: Data above are based on average production data from 2004. As the products originate from petroleum cracker operations these values may vary during the year as result of changing operational conditions of the cracker.

Note 2: The data above are typical values, not to be construed as specifications. Users should confirm results by their own tests.

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# Product Typical Composition

Component	RESIN OIL 80
Ethyl-Benzene	0 – 0.5 %
Xylenes	0 – 1 %
Styrene	2 – 5 %
alpha-Methylstyrene	2 – 5 %
DCPD	40 – 55 %
Vinyltoluenes	4 – 15 %
Indene	3 – 10 %
Me-Indenes	0 – 2 %
Naphthalene	0 – 2 %
Benzene	< 0.015 %

Note 1: all data are given in %-w/w unless stated otherwise.

Note 2: Data above are based on average production data from 2004. As the products originate from petroleum cracker operations these values may vary during the year as result of changing operational conditions of the cracker.

Note 3: The data above are typical values, not to be construed as specifications. Users should confirm results by their own test.

## Production Locations

Plaguemine (Louisiana, USA)

# Suggested Applications

RESIN OIL 80 is best used to produce Hydrocarbon Based Resins such as C9 Aromatics based Resins. These resins typically are used in applications where color of the resin is not a determining factor such as printing inks, road markings or paints or (colored) adhesives.

Alternatively it may be used as a raw material in the production of dicyclopentadiene that may be used in the production of hydrocarbons resins such as Cyclo-aliphatic resins or C5/C9 aromatic based resins or in the production of unsaturated polyester resins.

RESIN OIL 80 may also be used as a blending component in the production of unleaded gasoline.

### **More Information**

For more information about the Aromatic products of Dow (such as Material Safety Data Sheets, Sales Specifications, Availability, Technical Services & Development, Regulatory-and other information) please visit our product website at:

### www.dowaromatics.com

#### **Customer Information Center:**

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Published: June 2014

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