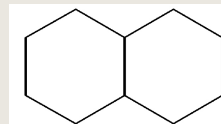


**DECAHYDRONAPHTHALENE****GENERAL DESCRIPTION**

VESTASOL<sup>®</sup> DHN is a cyclo-aliphatic hydrocarbon with a characteristic odor. It is insoluble in water but miscible with organic solvents. The mixture of isomers contain approx. 60 % trans-Decahydronaphthalene.

**SPECIFICATION**

Property	Value	Unit	Test method
Appearance	clear		visual
Color (Hazen)	≤ 10	mg Pt/l	DIN ISO 6271/ ASTM D 1209
Purity (mixture of isomeres)	≥ 98.0	% by weight	Gas chromatography
Water content	≤ 0.1	% by weight	DIN 51 777 / ISO 760
Acid content (calc. as acetic acid)	≤ 0.01	% by weight	ASTM D 1613

## TYPICAL DATA

Property	Value		Unit	Test method
Molecular weight (C <sub>10</sub> H <sub>18</sub> )	138.25		g/mol	-
Refractive index at 25°C	approx. 1.472			DIN 51 423
Density at 20°C	approx. 0.870-0.895		g/ml	DIN 51 757/ ASTM D 2111
Boiling range at 1013 hPa	185-195 (95 Vol.-% distil within 10°C)		°C	DIN 53 171
	<b>cis-Isomer</b>	<b>trans-Isomer</b>		
Solidification point	approx. - 43	approx. -30.4	°C	DIN ISO 3016
Viscosity at 20°C	approx. 3.4	approx. 2.1	mPa s	DIN 53 015
Solubility parameter at 25°C	17.6	17.0	(J/cm <sup>3</sup> ) <sup>1/2</sup>	-
Heat of evaporation at b.p.	39.8	38.6	kJ/mol	-
Vapor pressure at 50°C	1	4	hPa	-
Evaporation number (diethyl ether = 1)	approx. 100	approx. 100		DIN 53 170
Flash point	approx. 61	approx. 54	°C	DIN EN ISO 2719

## APPLICATION

VESTASOL® DHN is used as a solvent for fats, resins, waxes and lacquers.

High gloss and good flow is obtained when it is used in lacquers. It is well proved as a cleaning agent for print sheets and as a solvent for textile dyes.

It is used as a solvent in the production of amorphous polyolefins which are again used in the manufacture of compact disks, laser disks and digital video disks.

## TRANSPORT AND PACKAGING

Decahydronaphthalene is supplied in 180 kg non-returnable steel drums, as well as in road tankers.

For NAFTA: Decahydronaphthalene is supplied in 397 pound non-returnable steel drums, as well as in iso containers.



## STORAGE

VESTASOL® DHN can be stored in steel containers. Storage times up to 1 year in closed original containers are possible without influence to the product.

Storage temperature should not exceed 30 °C.

## SAFETY AND HANDLING

Please refer to our Material Safety Data Sheet.

Marl, June 10, 2018; This data sheet replaces all former issues.

VESTASOL® is a registered trademark of Evonik Industrie AG or one of its subsidiaries.

### Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

#### EVONIK RESOURCE EFFICIENCY GMBH

Business Line Crosslinkers  
Paul-Baumann-Str. 1  
45764 Marl  
Germany

[www.evonik.com/crosslinkers](http://www.evonik.com/crosslinkers)

For contact in your country, please visit: [www.evonik.com/crosslinkers-contact](http://www.evonik.com/crosslinkers-contact)

#### EVONIK CORPORATION

Business Line Crosslinkers  
299 Jefferson Road,  
Parsippany, NJ 07054-0677  
USA

#### EVONIK SPECIALITY CHEMICALS (SHANGHAI) CO., LTD.

Business Line Crosslinkers  
55, Chundong Road  
Xinzhuang Industry Park  
Shanghai, 201108  
China

