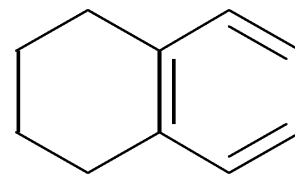


## VESTASOL® THN

### 1,2,3,4-Tetrahydronaphthalene



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#### General description

VESTASOL® THN is an aromatic-cycloaliphatic hydrocarbon. The naphthalene-like smelling, colorless liquid is insoluble in water and miscible with all common solvents.

#### Specification

| Property                     | Value  | Unit        | Test method                   |
|------------------------------|--------|-------------|-------------------------------|
| Appearance                   | clear  |             | visual                        |
| Color (Hazen)                | ≤ 20   | mg Pt/l     | DIN ISO 6271 /<br>ASTM D 1209 |
| Purity                       | ≥ 98.0 | % by weight | Gas chromatography            |
| Decahydronaphthalene content | ≤ 1.5  | % by weight | Gas chromatography            |
| Naphthalene content          | ≤ 0.7  | % by weight | Gas chromatography            |

#### Typical Data

|   |                                       |                                     |                             |
|---|---------------------------------------|-------------------------------------|-----------------------------|
| Molecular weight (C <sub>10</sub> H <sub>12</sub> ) | 132.21                                | g/mol                               |                             |
| Solidification                                      | approx. – 31                          | °C                                  | DIN ISO 3016                |
| Viscosity at 20°C                                   | approx. 2.2                           | mPa s                               | DIN 53 015                  |
| Solubility parameter at 25°C                        | 19.5                                  | (J/cm <sup>3</sup> ) <sup>1/2</sup> | –                           |
| Heat of evaporation at b.p.                         | 42.3                                  | kJ/mol                              | –                           |
| Vapor pressure at 20°C                              | 0.24                                  | hPa                                 | –                           |
| Evaporation number (diethyl ether = 1)              | approx. 200                           |                                     | DIN 53 170                  |
| Flash point   | approx. 71-77                         | °C                                  | DIN EN ISO 2719             |
| Refractive index at 25°C                            | approx. 1.539                         |                                     | DIN 51 423                  |
| Density at 20°C                                     | approx. 0.965-0.971                   | g/ml                                | DIN 51 757 /<br>ASTM D 2111 |
| Boiling range at 1013 hPa                           | 200-209                               | °C                                  | DIN 53 171                  |
|   | (min. 95 % by vol. distil within 9°C) |                                     |                             |

## Properties and Application

VESTASOL<sup>®</sup> THN dissolves fats, oils, linoxyn, rubber, waxes, asphalt, bitumen, pitch, phenol, naphthalene, iodine and sulphur among other things. It is used on a large scale in coatings and for the production of 1-naphthole. It dissolves colophony, congo copals, oil glyptals, coumarone resins and modified formaldehyde resins and is therefore widely used in the production of high-grade lacquers, as it imparts a good flow to the lacquers and gives high gloss, smooth film surfaces.

VESTASOL<sup>®</sup> THN is auto-oxidative and thus acts in drying oils as an oxygen donor.

The very high dissolving power for organic substances of all types promotes the adhesion of the individual paint layers to one another.

VESTASOL<sup>®</sup> THN is used as a solvent for herbicides.

## Transport and Packaging

VESTASOL<sup>®</sup> THN is supplied in 200 kg non-returnable steel drums, as well as in road tankers.

For NAFTA: VESTASOL<sup>®</sup> THN is supplied in 441 pound non-returnable steel drums, as well as in iso containers.

## Storage

Tetrahydronaphthalene 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 Safety Data Sheet.

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Replaces leaflet 43.13.312e /10.03 and all former issues  
Marl, July 7, 2004

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