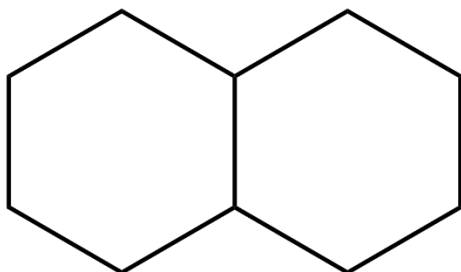


Decahydronaphthalene (DHN)



Decahydronaphthalene (DHN) is a stable, water-white, cyclo-aliphatic solvent with a low freezing point and high boiling point, low sulfur content and low metals content. DHN is useful as a solvent for specialty applications, as well as for dissolving naphthalene, fats, resins, oils and waxes. It can substitute for turpentine in lacquers, shoe polishes and waxes. It has uses in various unique fuels applications.

CAS number

91-17-8

Synonyms

Decalin; Bicyclo[4.4.0]decane; Perhydronaphthalene

Product code

41042

Typical Physical Properties of DHN

Molecular Weight	138.3 g/mol
Empirical Formula	C ₁₀ H ₁₈
Appearance	Colorless Liquid
Freezing Point	-43°C (-46°F)
Boiling Point @ 760mm Hg	187°C (368°F)
Flash Point – Closed Cup	58°C (138°F)
Autoignition Temperature	250°C
Density @ 20°C	0.88 kg/L 7.34 lb/gal
Vapor Pressure @ 20°C	0.11 kPa
Solubility in Water @ 20°C	0.89 mg/L
Surface Tension @ 20°C	31 dyne/cm
Viscosity @ 20°C	3.7 cP
Lower Explosive Limit	0.7 v/v%
Upper Explosive Limit	4.9 v/v%

Note: The properties reported above are typical physical properties. Monument Chemical in no way guarantees that the product from any particular lot will conform exactly to the given values.

Health and safety information

Under current U.S. OSHA's Hazardous Communication program DHN is classified as a flammable liquid and can cause serious eye and skin damage. Keep the material away from heat sources, hot surfaces, open flames, and sparks.

Observe good industrial hygiene practices and use appropriate Personal Protective Equipment.

For full safety information please refer to the Safety Data Sheet.

Storage and Handling

General industry practice is to store DHN in carbon steel vessels. Storage in properly lined steel or stainless steel to avoid slight discoloration from carbon steel is recommended. Product stored or delivered in unlined carbon steel vessels must be filtered due to technically unavoidable particles.

DHN should be stored under a nitrogen blanket when available. This product may absorb water if exposed to air. Avoid contact with air when storing for long periods of time.

DHN should be stored only in tightly closed, properly vented containers away from heat, sparks, open flame or strong oxidizing agents.

Handle empty containers carefully. Combustible residue remains after emptying.

Provided proper storage and handling precautions are taken, DHN manufactured and delivered by Monument Chemical is stable for at least 12 months from the date of manufacture. DHN that is subsequently repackaged, handled and/or delivered by third parties may have a different shelf life and may require third party shelf life studies. **Color may increase overtime depending on storage conditions.** Product past the retest date should be evaluated to confirm that all specifications are within their limits before use.

Additional Information

To learn more about Monument Chemical and the products and services we offer please visit our website at www.monumentchemical.com.

Effective Date: 10/29/2021

Revision: 2

Disclaimers

Please refer to the Safety Data Sheet (SDS) for complete information on Storage and Handling, Toxicological

Properties, Personal Protection, First Aid, Spill and Leak Procedures, and Waste Disposal. To order an SDS, email SDS@monumentchemical.com. Before using or handling this product, the SDS should be thoroughly reviewed.

Monument Chemical believes the information in this specific product Technical Data Sheet (TDS) is accurate, but makes no representations as to the sufficiency or completeness of the product or information in this TDS and makes no commitment to correct or bring up-to-date any such information and makes no commitment related to the use of the product in combination with other chemicals or as part of any other chemical processes. **MONUMENT CHEMICAL MAKES NO WARRANTY TO THE USER OR RECIPIENT OF ANY PRODUCT FROM MONUMENT CHEMICAL, OR WITH RESPECT TO THE INFORMATION PROVIDED WITH THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, OF FITNESS FOR A PARTICULAR PURPOSE, OR OF NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR PATENTS, WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING OR PERFORMANCE, USAGE OF TRADE OR OTHERWISE.**

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