

PRODUCT BACKGROUNDER

Dicyclopentadiene (DCPD)

Important! For detailed information on this product and emergency measures, obtain the applicable Material Safety Data Sheet (MSDS). In the case of an emergency, please call our 24-hour hotline at 1-800-561-6682 or 1-403-314-8767.

May also be called: DCPD mixture, Cyclopentadiene dimer, bicyclopentadiene, DCPD-codimer mixture

Product/Substance Use:

- DCPD is manufactured at NOVA Chemicals' Corunna, Ontario facility and is transported by railcar.
- This product is used to make a wide range of specialty products including polyester resins, adhesives, coatings, varnishes, and other specialty chemicals.

Characteristics and Safe Handling:

- DCPD is regulated in the workplace as combustible and very toxic.
- It is regulated in transportation as flammable.
- This product is a clear-colored liquid with a pungent and penetrating odor.
- If released from containment, DCPD will readily evaporate and may be ignited by heat, sparks or flames. Containers exposed to fire conditions may explode.
- Any liquid or vapor release must be monitored due to risk of fire or explosion, and possible toxic effects. Ignition from a distant source with flashback is possible. Vapors are heavier than air and may collect to dangerous levels in low, underground or confined areas.
- Product may destabilize if subjected to extreme heat conditions and may ignite or rapidly build pressure causing possible container explosions. This product is listed in some references as "shock sensitive". Shock sensitive chemicals may explode with movement, friction or heat.
- Inhibitor is added to stabilize product in storage and where product is concentrated in distillation or evaporation processes.
- Any equipment used in areas of handling or storage must be approved for flammable liquids and must be properly grounded for control of static electricity.
- DCPD will float on water and product components evaporate rapidly. Any liquid release on water must be isolated, contained and recovered or cleaned up by properly trained and equipped personnel.

Health and Safety Information:

- This product is harmful if inhaled. Ensure adequate ventilation is available. Breathing product vapors may cause respiratory system irritation and at high concentrations may cause headache, dizziness, nausea, drowsiness and loss of coordination. Over time, possible damage to the liver, kidney and blood system may occur. With extended contact (usually in an enclosed space), convulsions, unconsciousness or death is possible.
- Contact with DCPD is irritating to the skin and to the eyes. Wear all recommended personal protective equipment if any contact with this material is likely. Flush immediately out of eyes and/or off of skin. Prolonged skin contact may cause irritation/dermatitis. Immediately remove and clean any contaminated clothing prior to reuse or discard.
- DCPD is very harmful if accidentally swallowed and may cause liver and kidney damage. Seek immediate medical attention. **DO NOT INDUCE VOMITING**, as liquid drawn into lungs may cause serious injury (chemical pneumonia).

Environmental Information:

- DCPD is volatile, insoluble in water (floats on water) with significant absorption into soil and sediment. Product has the potential to produce a high to moderate level of toxicity in aquatic and terrestrial life. Components are considered toxic to aquatic life and may accumulate in exposed plant or animal tissues.
- DCPD will photo-degrade in air, with an estimated half-life of 1-3 hours. DCPD in surface waters will volatilize in 3-4 hours, with some possible adsorption into suspended matter or sediment. This will degrade depending on temperatures and water conditions in an estimated 80 days. DCPD biodegrades very slowly in ground waters or soils. Estimated half-life in soils is 4-7 years. Half-life for microbial decomposition in ground water under aerobic conditions is estimated at 1-2 years. Under aerobic conditions, material degrades into intermediates that are believed to be less odorous and less toxic than the original material. Soil remediation may be required after large spills.
- Associated wastes may be regulated in Canada and in the United States. Ensure all applicable regulations are met.

Last update: September 11, 2008

For more information on this, or any other NOVA Chemicals' product, please contact us at the nearest location below during business hours or visit our website at www.novachemicals.com :

NOVA Chemicals Corporation

PO Box 2518, Station M
Calgary, Alberta
Canada T2P 5C6
Tel: 1-403-750-3600

NOVA Chemicals Inc.

1550 Coraopolis Heights Road
Moon Township, PA.
USA 15108
Tel: 1-412-490-4000
Toll Free: 1-866-ASK-NOVA

NOVA Chemicals (International) S.A.

Avenue de la Gare 14
CH-1700 Fribourg
Switzerland
Tel: 41-26-426-57-57

THIS INFORMATION IS FURNISHED IN GOOD FAITH, WITHOUT WARRANTY, REPRESENTATION, INDUCEMENT OR LICENSE OF ANY KIND. ALL IMPLIED WARRANTIES AND CONDITIONS, INCLUDING WARRANTIES AND CONDITIONS OF QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE SPECIFICALLY EXCLUDED. NO FREEDOM FROM INFRINGEMENT OF ANY PATENT OWNED BY NOVA CHEMICALS OR OTHERS IS TO BE INFERRED.