

SAFETY DATA SHEET

Hexanediol-1,6 pure liquid



04807685

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

Product name : Hexanediol-1,6 pure liquid
Use of the substance/preparation : Intermediate
Supplier/Manufacturer : LANXESS Deutschland GmbH, Industrial & Environmental Affairs
51369 Leverkusen, Germany, Telephone: +49 214 30 65109
E-mail: infosds@lanxess.com
Emergency telephone number : +49 214 30 99300 (Sicherheitszentrale CHEMPARK Leverkusen)

2. HAZARDS IDENTIFICATION

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Remarks : CAUTION ! Hot melt; risk of skin burns.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product definition (REACH) : Mono-constituent substance

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

4. FIRST AID MEASURES

First-aid measures

Inhalation : Move affected person to fresh air. If patient has difficulty in breathing, administer oxygen, keep him calm and protect him from loss of warmth. Get medical attention.

Ingestion : Wash out mouth with water. Ensure that the patient drinks water. Call a physician.

Skin contact : Remove victims from the danger zone without endangering your own safety. Remove contaminated clothing and shoes. Wash skin immediately with plenty of water and soap. CONTACT WITH THE HOT MELT: Cooling immediately with plenty of water. Do not remove product crusts which may have formed neither forcibly nor by applying any solvents to the skin involved. In order to obtain medical care for possible burns and for a smooth cleansing of the skin, seek medical advice immediately.

Eye contact : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

See section 11 for more detailed information on health effects and symptoms.

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5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Not suitable** : None known.
- Special exposure hazards** : In a fire or if heated, a pressure increase will occur and the container may burst.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8). Hazard of slipping on spilt product.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can

be hazardous.

Storage : Store in accordance with local regulations. Store in a dry place. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values : Not available.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Risk management measures

Occupational exposure controls

Technical measures : If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection measures

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations <1 hours (breakthrough time): Polyvinyl chloride - PVC or Rubber gloves.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: Tightly fitting safety goggles.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Environmental exposure controls

Technical measures : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state : Liquid. [hot melt]
Colour : Colourless to light yellow.
Odour : Odourless.

Important health, safety and environmental information

Boiling point : 245 °C (1013 hPa)
141 to 142 °C (130 hPa)
Melting point : 41°C (105.8°F)
Flash point : Closed cup: 147°C (296.6°F) [DIN 51755]
Explosion limits : Lower: 6.6%
Upper: 16%
Vapour pressure : 6.5 hPa (126°C)
Density : 0.95 kg/L (50 °C)
Bulk density : 530 kg/m³
Viscosity : Dynamic: 59.3 mPa·s
Kinematic: 0.268 cm²/s
Ignition temperature : 335°C

10. STABILITY AND REACTIVITY

Stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Materials to avoid : No specific data.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
1,6-hexanediol	LD50	- Rabbit	>10000	-	-
	Dermal		mg/kg		
	LD50	- Rat	3750 mg/kg	-	-
	Oral				

Irritation/Corrosion

Skin : slightly irritant
Eyes : slightly irritant

Sensitiser

Skin : Not sensitizing

12. ECOLOGICAL INFORMATION

Ecotoxicity data

Product/ingredient name	Test	Result	Species	Exposure
1,6-hexanediol	-	Acute IC50 2200 mg/L	- Algae - Desmodesmus subspicatus	72 hours
	-	Acute EC50 >500 mg/L	- Daphnia - Daphnia magna	48 hours
	-	Acute LC50 460 to 1000 mg/L	- Fish - Leuciscus idus	96 hours
	ISO 8192	EC50 >1000 mg/l	- Bacteria - activated sludge	0.5 hours

Other ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hexanediol-1,6 pure liquid	-	-	Readily

Product/ingredient name	Rate of degradation/ elimination (%)	Period (days)	Test
Hexanediol-1,6 pure liquid	>70 %	28 days	302B Inherent Biodegradability: Zahn-Wellens/EMPA Test

AOX : The product does not contain organically bound halogens which could lead to an AOX value in waste water.

13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : Examine possibilities for re-utilisation. Product residues and uncleaned empty containers should be packaged, sealed, labelled, and disposed of or recycled according to relevant national and local regulations. Where large quantities are concerned, consult the supplier. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues. For disposal within the EC, the appropriate code according to the European Waste List (EWL) should be used. It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste List (EWL).
- Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. TRANSPORT INFORMATION

Regulation	UN number	Proper shipping name	Class	PG	Label	Additional information
ADR/RID	-	-	-	-	-	Not regulated.
GGVSE	-	-	-	-	-	Not regulated.
ADNR	-	-	-	-	-	Not regulated.
IMDG	-	-	-	-	-	Not regulated.
IATA	-	-	-	-	-	Forbidden

PG: Packing group

Hot melt; risk of skin burns.
Has a slight odour.
Keep separated from foodstuffs.

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Industrial applications.

Risk phrases : This product is not classified according to EU legislation.

16. OTHER INFORMATION

History

Date of printing : 2009-10-29
Date of issue : 2009-10-29
Date of previous issue : No previous validation
Version : 2

▣ Indicates information that has changed from previously issued version.

Notice to reader

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance.