SAFETY DATA SHEET
LORD 320

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name LORD 320

Product number 3003628

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For industrial and professional use only. Two-component, epoxy-based adhesive. Resin.

1.3. Details of the supplier of the safety data sheet

Supplier

LORD Germany GmbH
Ottostrasse 28
D-41836 Hückelhoven
Germany
TEL : +49 (0) 2433-5257-0
FAX: + 49 (0) 2433-5257-18
Questions concerning the content of the SDS: EuropeMSDS@lord.com
General requests: info.europe@lord.com

Manufacturer

LORD CORPORATION
111 LORD DRIVE
CARY, NC 27511-7923
U.S.A.

Information Tel.: 001 814 868 0924

1.4. Emergency telephone number

Emergency telephone NON-TRANSPORTATION EMERGENCY TELEPHONE NO. (USA): 001 814 763 2345

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

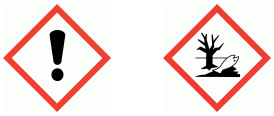
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xi;R36/38. R43. N;R51/53.

2.2. Label elements

Pictogram



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Signal word	Warning
Hazard statements	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P280 Wear protective clothing, gloves, eye and face protection.
Supplemental label information	EUH205 Contains epoxy constituents. May produce an allergic reaction.
Contains	EPOXY RESIN (Number average MW <= 700)

2.3. Other hazards

Due to missing data, not all ingredients could be reviewed on PBT and vPvB criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EPOXY RESIN (Number average MW <= 700) **< 60%**

CAS number: 25068-38-6 EC number: 500-033-5 REACH registration number: 01-2119456619-26-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	R43 Xi;R36/38 N;R51/53

2,2'-OXYBISETHANOL **< 5%**

CAS number: 111-46-6 EC number: 203-872-2

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Xn;R22

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. For breathing difficulties, oxygen may be necessary. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

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Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information Effects may be delayed. Keep affected person under observation.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea. Irritation of nose, throat and airway.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting. Drowsiness, dizziness, disorientation, vertigo.

Skin contact Skin irritation. Prolonged contact may cause redness, irritation and dry skin. Allergic rash.

Eye contact Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Effects may be delayed. Keep affected person under observation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam. Carbon dioxide (CO_2). Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO_2). Refer to section 10 of this safety data sheet for more information on hazardous decomposition products. Keep container tightly closed and dry. Containers can burst violently or explode when heated, due to excessive pressure build-up. Use water spray to keep fire exposed containers cool. Irritating and/or toxic gases and particulates may be generated by thermal decomposition or combustion.

5.3. Advice for firefighters

Protective actions during firefighting Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Provide adequate ventilation. Do not touch or walk into spilled material. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Smaller quantities of residue may be collected by an absorbent. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

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Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Persons susceptible to allergic reactions should not handle this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

Storage class LGK 10 (TRGS 510)

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

2,2'-OXYBISETHANOL

Long-term exposure limit (8-hour TWA): WEL 23 ppm 101 mg/m³
Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. All handling should only take place in well-ventilated areas.

Eye/face protection Use approved safety glasses with side shields. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles and face shield.

Hand protection Wear protective gloves made of the following material: Neoprene. Nitrile rubber. Viton rubber (fluoro rubber). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Do not smoke in work area. Wash promptly if skin becomes contaminated. Wash hands thoroughly after handling. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Contaminated clothing should be placed in a closed container for disposal or decontamination. Warn cleaning personnel of any hazardous properties of the product.

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Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Colour	White.
Odour	Mild.
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	93°C SCC (Setaflash closed cup).
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.50 - 1.55 @ 20°C
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	300,000 - 1,000,000 mPa s @ 25°C
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of < 1% . The VOC-value given was calculated according to the guidelines specified in Directive 1999/13/EC.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Hazardous polymerisation will not occur under normal conditions.

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10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Amines. Strong acids. Strong oxidising agents. Water, steam, water mixtures. Hydroxyl, or active hydrogen compounds.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO_2). Aldehydes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 36,049.02667628

General information The present product is a chemical preparation within the meaning of the REACh Regulation 1907/2006/EC. To avoid testing the product in animal experiments the evaluation is made based on toxicological data and content by weight of the individual ingredients according to 1999/45/EC or analagous evaluations of comparable products.

Inhalation No significant hazard at normal ambient temperatures. Heating may generate the following products: Irritating gases or vapours.

Ingestion Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact Irritating to skin. May cause sensitisation by skin contact.

Eye contact Irritating to eyes.

Acute and chronic health hazards The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

SECTION 12: Ecological Information

Ecotoxicity Do not empty into drains, soil or bodies of water. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Acute toxicity - fish No data available.

12.2. Persistence and degradability

Persistence and degradability No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Due to missing data, not all ingredients could be reviewed on PBT and vPvB criteria.

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12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. Do not dump into any sewers, on the ground, or into any body of water. Not be to be disposed of together with household waste. Any disposal practice must be in compliance with all local and national laws and regulations. Handle and dispose contaminated packages in the same way as the product itself. Fully cured product residues are generally not regarded as hazardous waste.

Disposal methods The product as supplied should be disposed of as hazardous waste according to European Directive 91/689/EEC.

Waste class The waste code number applies to actual wastes depending on its origin and not to substances or mixtures as placed on the market. Only the practical application of the user enables the proper allocation. Allocation of the waste code number according to the European Waste Catalogue (Commission Decision 2000/532/EC and 2001/118/EC) should be carried out in agreement with the regional waste disposal company and/or the supervisory authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700))

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID subsidiary risk

ADR/RID label 9

IMDG class 9

IMDG subsidiary risk

ICAO class/division 9

ICAO subsidiary risk

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Transport labels

14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (JO L 396 du 30.12.2006). Dangerous Substances Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.
Water hazard classification	WGK 2 (VwVwS 17 May 1999 Annex 4)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data	Dangerous Properties of Industrial Materials Report, N.Sax et.al. Safety Data Sheets, Misc. manufacturers.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	EU Regulatory Compliance Specialist (Product Safety).

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Revision date	29/05/2015
Revision	5
Supersedes date	26/06/2013
SDS number	10449
Risk phrases in full	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin. R43 May cause sensitisation by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.