Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 1/17/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Denka Neoprene Liquid Dispersion

Product code : LD 571, LD 842A

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Rubber products

Restrictions on use : For manufacturing and industrial use only

1.3. Supplier

Denka Performance Elastomer LCC 8000 Building 560 Hwy 44 LaPlace, LA USA

Telephone +1-985-536-5217

1.4. Emergency telephone number

Emergency number : +1-800-424-9300 (CHEMTREC)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Reproductive toxicity, Category 2 H361 Suspected of damaging fertility or the unborn child.

Specific target organ toxicity – Repeated exposure, Category 2 H373 May cause damage to organs through prolonged or repeated

exposure.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H361 - Suspected of damaging fertility or the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P314 - Get medical advice/attention if you feel unwell.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
2,2'-iminodiethanol; diethanolamine	CAS-No.: 111-42-2	< 2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 2, H373
Potassium hydroxide	CAS-No.: 1310-58-3	< 0.6	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sodium hydroxide	CAS-No.: 1310-73-2	< 0.2	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after eye contact

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If symptoms develop, obtain

medical attention.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If symptoms develop, obtain medical attention.

: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms develop, obtain medical attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause damage to organs.

Chronic symptoms : Suspected of damaging fertility or the unborn child.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water. Foam. Carbon dioxide. Dry powder.

Unsuitable extinguishing media None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire When heated to decomposition, emits toxic fumes. Hydrogen chloride. Carbon monoxide.

Aldehydes. Organic acids.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Cool closed containers exposed to fire with

water spray. Avoid fire-fighting water entering the environment.

Protection during firefighting Wear positive pressure self-contained breathing apparatus (SCBA). Wear suitable protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate area. Avoid breathing vapours. Avoid contact with eyes, skin and clothing. Evacuate

unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required. See Section 8.

Emergency procedures : Ventilate area. Avoid contact with eyes, skin and clothing. Avoid inhalation of vapours.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

: Stop leak, if possible without risk. Dam up the liquid spill. For containment

Methods for cleaning up Take up liquid spill into absorbent material, e.g.: sand/earth.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Avoid breathing vapours. Avoid contact with skin, eyes and clothing. Ensure adequate

ventilation. Pregnant women should not work with the product, if there is the least risk of

exposure.

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial Hygiene measures hygiene and safety practice. Wash hands and other exposed areas with mild soap and water

before eating, drinking or smoking and when leaving work. Take off immediately all contaminated

clothing and wash it before reuse.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Protect from freezing. Protect material from direct sunlight. Use

properly labelled and closeable containers. Store seperately from incompatible materials.

Incompatible materials : Strong oxidising agents. Strong acids. Aluminium.

Storage temperature : Ambient

Packaging materials : Suitable storage materials: Resin coated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,2'-iminodiethanol; diethanolamine (111-42-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Diethanolamine	
ACGIH TWA (mg/m³)	1 mg/m³ (IFV - Inhalable fraction and vapor)	
Remark (ACGIH)	TLV® Basis: Liver & kidney dam. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)	
Regulatory reference	ACGIH 2022	
Potassium hydroxide (1310-58-3)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Potassium hydroxide	
ACGIH OEL C	2 mg/m³	
Remark (ACGIH)	URT, eye, & skin irr	
Regulatory reference	ACGIH 2022	
Sodium hydroxide (1310-73-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Sodium hydroxide	
ACGIH OEL C	2 mg/m³	
Remark (ACGIH)	TLV® Basis: URT, eye, & skin irr	
Regulatory reference	ACGIH 2022	
USA - OSHA - Occupational Exposure Limits		
Local name	Sodium hydroxide	
OSHA PEL (TWA) (mg/m³)	2 mg/m³	
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Do not allow to enter drains or water courses.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

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Hand protection:

Wear chemically resistant protective gloves. (recommended). Standard EN 374 - Protective gloves against chemicals. Recommended: Rubber, Plastic. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Wear splash resistant safety goggles. (recommended). Standard EN 166 - Personal eye-protection.

Skin and body protection:

Long-sleeved protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. (recommended). AP (EN 141). Gas/vapour filter

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : milky white

Odour : Slight Characteristic
Odour threshold : No data available

pH : > 12

Melting point : No data available

Freezing point : -5 - 0 °C

Boiling point : No data available

Flash point : > 100 °C

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available Relative vapour density at 20°C : No data available

Relative density : 1.11 – 1.13 g/cm³ @ 25°C

Solubility : Water: completely miscible with: Water

Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available

Viscosity, kinematic : varies depending on the type

Viscosity, dynamic : No data available
Explosive limits : Not applicable.
Explosive properties : Not explosive.
Oxidising properties : Not oxidising.

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7).

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4. Conditions to avoid

Heat. Direct sunlight.

10.5. Incompatible materials

STOT-repeated exposure

Strong oxidising agents. Strong acids. Aluminium.

10.6. Hazardous decomposition products

Dry rubber. Carbon monoxide. Carbon dioxide. Hydrogen chloride. Sulphur dioxide. Metal oxides. Nitrous gasses.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

Additional information	: Based on available data, the classification criteria are not met	
2,2'-iminodiethanol; diethanolamine (111-42-2)		
LD50 oral, rat	≈ 1100 mg/kg bodyweight (male), (OECD 401 method)	
ATE US (oral)	500 mg/kg bodyweight	
Potassium hydroxide (1310-58-3)		
LD50 oral, rat	333 mg/kg (OECD 425 method)	
Skin corrosion/irritation	: Not classified. (Based on available data, the classification criteria are not met) pH: > 12	
Serious eye damage/irritation	: Not classified. (Based on available data, the classification criteria are not met) pH: > 12	
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)	
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)	
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)	
2,2'-iminodiethanol; diethanolamine (111-42-2)		
IARC group	2B - Possibly carcinogenic to humans	
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.	
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)	
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.	
2.2'-iminodiethanol; diethanolamine (111-42-2)		

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May cause damage to organs through prolonged or repeated exposure.

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Aspiration hazard : Not classified

(Based on available data, the classification criteria are not met)

Viscosity, kinematic : varies depending on the type Symptoms/effects : May cause damage to organs.

Chronic symptoms : Suspected of damaging fertility or the unborn child.

SECTION 12: Ecological information

12.1. Toxicity

2,2'-iminodiethanol; diethanolamine (111-42-2)		
LC50 fish	460 mg/l - 96 Hours (Onchorynchus mykiss)	
EC50 Daphnia	30.1 mg/l - 48 Hours (24 °C, Ceriodaphnia dubia, Mobility)	
ErC50 algae	9.5 mg/l - 72 Hours (Pseudokirchneriella subcapitata)	
NOEC chronic crustacea	0.78 mg/l - 21 days (Daphnia magna, reproduction)	
EC10, fish, Chronic	1.05 mg/l (21 days, Daphnia magna, reproduction)	
EC10, algae	1.1 mg/l (72 Hours, Pseudokirchneriella subcapitata, Growth rate)	
Sodium hydroxide (1310-73-2)		
LC50 fish	35 – 189 mg/l	
EC50 Daphnia	40.4 mg/l - 48 Hours (Ceriodaphnia sp.)	

12.2. Persistence and degradability

Denka Neoprene Liquid Dispersion		
Persistence and degradability	No data available.	
2,2'-iminodiethanol; diethanolamine (111-42-2)		
Persistence and degradability Readily biodegradable.		
Biodegradation 93 % - 28 days (Activated sludge), (OECD 301F method)		
Potassium hydroxide (1310-58-3)		
Persistence and degradability Not relevant for inorganic substances.		

12.3. Bioaccumulative potential

Denka Neoprene Liquid Dispersion		
Bioaccumulative potential	No data available.	
2,2'-iminodiethanol; diethanolamine (111-42-2)		
Log Pow	-2.46 (25 °C, pH: 6.8-7.3), (OECD 107 method)	
Bioaccumulative potential Based on the n-octanol/water partition coefficient accumulation in organisms is not expect		
Potassium hydroxide (1310-58-3)		
Bioaccumulative potential	Low bioaccumulation potential.	

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12.4. Mobility in soil

Denka Neoprene Liquid Dispersion	
Ecology - soil	Dispersible in water.
2,2'-iminodiethanol; diethanolamine (111-42-2)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.99 (25 °C, pH: 7), (calculated value)
Ecology - soil Not expected to adsorb to soil.	
Potassium hydroxide (1310-58-3)	
Mobility in soil	Not expected to adsorb to soil

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should

be taken to an approved waste handling site for recycling or disposal.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

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Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : No special precautions required

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

2,2'-iminodiethanol; diethanolamine CAS-No. 111-42-2 < 2%

2,2'-iminodiethanol; diethanolamine (111-42-2)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 100 lb

Potassium hydroxide (1310-58-3)

CERCLA RQ 1000 lb

Sodium hydroxide (1310-73-2)

CERCLA RQ 1000 lb

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15.2. International regulations

CANADA

2,2'-iminodiethanol; diethanolamine (111-42-2)

Listed on the Canadian DSL (Domestic Substances List)

Potassium hydroxide (1310-58-3)

Listed on the Canadian DSL (Domestic Substances List)

Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

2,2'-iminodiethanol; diethanolamine (111-42-2)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations



This product can expose you to , which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
2,2'-iminodiethanol; diethanolamine(111-42-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Potassium hydroxide(1310-58-3)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Sodium hydroxide(1310-73-2)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Data sources : US OSHA HazCom (GHS) 25 May 2012.

Other information : Physical hazards: On basis of test data. Health hazards: Calculation method. Environmental

hazards: Calculation method.

Full text of I	Full text of H-phrases	
H290	May be corrosive to metals.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H361	Suspected of damaging fertility or the unborn child.	

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Full text of H-phrases	
H373	May cause damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life

ACGIH (American Conference of Government Industrial Hygienists) BCF (Bioconcentration factor) CAS (Chemical Abstracts Service) number DOT (Department Of Transportation (US)) EC50 (Effective Concentration 50%) IARC (International Agency for Research on Cancer) IATA (International Air Transport Association) IBC (Intermediate Bulk Container) IMDG (International Maritime Dangerous Goods Code) IMO (International Maritime Organisation) LC50 (Lethal Concentration 50%) LD50 (Lethal Dose 50%) Koc (Soil adsorption coefficient) NIOSH (National Institute for Occupational Safety and Health) NOEC (No Observed Effect Concentration) OECD (Organisation for Economic Co-operation and Development) OEL (Occupational exposure limit) OSHA (Occupational Safety and Health Administration) (US) PEL (Permissible Exposure Limit) OSAR (Quantitative Structure-Activity Relationship) STEL (Short Term Exposure Limit)	Abbreviations and acronyms		
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PEL (Permissible Exposure Limit) QSAR (Quantitative Structure-Activity Relationship)		OEL (Occupational exposure limit)	
QSAR (Quantitative Structure-Activity Relationship)		OSHA (Occupational Safety and Health Administration) (US)	
		PEL (Permissible Exposure Limit)	
STEL (Short Term Exposure Limit)		QSAR (Quantitative Structure-Activity Relationship)	
		STEL (Short Term Exposure Limit)	
TLV (Threshold Limit Value) (ACGIH)		TLV (Threshold Limit Value) (ACGIH)	
TSCA (Toxic Substances Control Act) (US)		TSCA (Toxic Substances Control Act) (US)	
TWA (Time Weighted Average)		TWA (Time Weighted Average)	
UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)		UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)	
WAF (Water Accommodated Fraction)		WAF (Water Accommodated Fraction)	

NFPA health hazard

: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

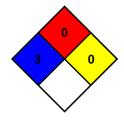
NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and

sand.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

: * - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.