

SAFETY DATA SHEET

Creation Date 22-Oct-2010

Revision Date 21-Oct-2021

Revision Number 5

1. Identification

Product Name N-n-Butyldiethanolamine
Cat No. : L09953
CAS No 102-79-4
Synonyms 2,2'-(Butylimino)diethanol
Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.
After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation

Category 1

Label Elements

Signal Word

Danger

Hazard Statements

Causes serious eye damage

**Precautionary Statements****Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|-------------------------|----------|----------|
| N-N-Butyldiethanolamine | 102-79-4 | <=100 |

4. First-aid measures

| | |
|--|---|
| General Advice | If symptoms persist, call a physician. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Inhalation | If not breathing, give artificial respiration. Remove to fresh air. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |
| Most important symptoms and effects | None reasonably foreseeable. Causes severe eye damage. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---------------------------------------|---|
| Suitable Extinguishing Media | Water spray. Carbon dioxide (CO ₂). Dry chemical. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 141 °C / 285.8 °F |
| Method - | CC (closed cup) |
| Autoignition Temperature | 260 °C / 500 °F |
| Explosion Limits | |

| | |
|---|--------------------------|
| Upper | 6.50% |
| Lower | 1.10% |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
3

Flammability
0

Instability
0

Physical hazards
N/A

6. Accidental release measures**Personal Precautions**

Use personal protective equipment as required. Ensure adequate ventilation.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

7. Handling and storage**Handling**

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation.

Storage.

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.

8. Exposure controls / personal protection**Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|--|-----------------------------|
| Physical State | Liquid |
| Appearance | Clear Light yellow |
| Odor | Slight |
| Odor Threshold | No information available |
| pH | 11.1 100 g/l aq. sol |
| Melting Point/Range | -70 °C / -94 °F |
| Boiling Point/Range | 283 - °C / 541.4 - 532.4 °F |
| Flash Point | 141 °C / 285.8 °F |
| Method - | CC (closed cup) |
| Evaporation Rate | No information available |
| Flammability (solid,gas) | Not applicable |
| Flammability or explosive limits | |
| Upper | 6.50% |
| Lower | 1.10% |
| Vapor Pressure | 1.2 Pa @ 25 °C |
| Vapor Density | 5.55 |
| Specific Gravity | 0.968 |
| Solubility | Soluble |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 260 °C / 500 °F |
| Decomposition Temperature | No information available |
| Viscosity | No information available |
| Molecular Formula | C8 H19 N O2 |
| Molecular Weight | 161.24 |

10. Stability and reactivity

| | |
|----------------------------------|---|
| Reactive Hazard | None known, based on information available |
| Stability | Stable. |
| Conditions to Avoid | Incompatible products. |
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂) |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------------------|---------------------------|---------------------------|-----------------|
| N-N-Butyldiethanolamine | LD50 = 4250 mg/kg (Rat) | LD50 > 2000 mg/kg (Rat) | Not listed |

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|-----------------|--|
| Irritation | No information available |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|-------------------------|----------|------------|------------|------------|------------|------------|
| N-N-Butyldiethanolamine | 102-79-4 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects Not mutagenic in AMES Test

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|-------------------------|----------|------|---|-----------------------------|
| N-N-Butyldiethanolamine | 102-79-4 | X | ACTIVE | - |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

X = listed.

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-------------------------|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| N-N-Butyldiethanolamine | 102-79-4 | X | - | 203-055-0 | X | X | X | X | X | KE-04314 |

U.S. Federal Regulations

| | |
|---|---|
| SARA 313 | Not applicable |
| SARA 311/312 Hazard Categories | See section 2 for more information |
| CWA (Clean Water Act) | Not applicable |
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |
| CERCLA | Not applicable |
| California Proposition 65 | This product does not contain any Proposition 65 chemicals. |

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------------|---------------|------------|--------------|----------|--------------|
| N-N-Butyldiethanolamine | X | - | X | - | - |

U.S. Department of Transportation

| | |
|-----------------------------|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

| | |
|---|--|
| U.S. Department of Homeland Security | This product does not contain any DHS chemicals. |
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Other International Regulations

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|-----------------------|--------------------------|
| Mexico - Grade | No information available |
|-----------------------|--------------------------|

16. Other information

| | |
|-------------------------|---|
| Prepared By | Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com |
| Creation Date | 22-Oct-2010 |
| Revision Date | 21-Oct-2021 |
| Print Date | 21-Oct-2021 |
| Revision Summary | SDS authoring systems update, replaces ChemGes SDS No. 102-79-4/2. |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS