

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 16 Dec 2024

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

1.1. Product name:

D18-N-Nitrosodibutylamine

1.1. Catalog No.:

689042

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

04451 Cunnersdorf Deutschland

Tel. +49 34291 3372-36 Fax. +49 34291 3372-39 contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36 This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008 Acute toxicity - Oral Category 4 - (H302) Carcinogenicity Category 2 - (H351)

2.2. Label elements

2.2.1. Pictogram



2.2.2.

Contains N-nitrosodi-n-butyl-d18-amine Signal word Warning Hazard statements H302 - Harmful if swallowed H351 - Suspected of causing cancer



Precautionary Statements - EU (§28, 1272/2008) P201 - Obtain special instructions before use P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear protective gloves/protective clothing/eye protection/face protection P308 + P313 - IF exposed or concerned: Get medical advice/attention P501 - Dispose of contents/ container to an approved waste disposal plant 2.3. Other hazards No information available. This substance does not meet the PBT/vPvB criteria of REACH, annex XIII. Chemical name N-nitrosodi-n-butyl-d18-amine EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name N-nitrosodi-n-butyl-d 18-amine 1219798-82-9 Weight-% 100 REACH registrationnumber: -EC No:-Classificationaccording to Regulation (EC) No. 1272/2008 [CLP] Specificconcentration limit (SCL) M-Factor M-Factor(long-term) Full text of H- and EUH-phrases: see section 16 Acute Toxicity Estimate No information available Additional information This component contains a stable isotope. This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

3.1.1. Formula

C8D18N2O

3.1.2. Molecular Weight (g/mol)

176.35



3.1.3. CAS-No.

1219798-82-9

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.

4.2. Most important symptoms and effects, both acute and delayed Symptoms No information available.

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

Note to doctors Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the Surrounding environment. Large Fire CAUTION: Use of water spray when fighting fire may be inefficient. Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams. 5.2. Special hazards arising from the substance or mixture Specific hazards arising from the chemical No information available. 5.3. Advice for firefighters Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Personal precautions Ensure adequate ventilation. Other information Refer to protective measures listed in Sections 7 and 8. For emergency responders Use personal protection recommended in Section 8. 6.2. Environmental precautions Environmental precautions See Section 12 for additional Ecological Information. 6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal. Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations. 6.4. Reference to other sections



Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

skin, eyes or clothing.
General hygiene considerations Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.
7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Please refer to the manufacturers certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on

the CoA. 7.3. Specific end use(s) Identified uses

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration

(PNEC)

No information available.

8.2. Exposure controls Personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Hand protection Wear suitable gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Duration of contact PPE - Glove material Wear protective butyl rubber gloves

Duration of contact PPE - Glove material Wear protective butyl rubber gloves Glove thickness Break through time Skin and body protection Wear suitable protective clothing. Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. General hygiene considerations Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state Liquid



Appearance Oily Colour light yellow Odour No information available. Odour threshold No information available Property Values Remarks o Method Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known Upper flammability or explosive limits No data available Lower flammability or explosive limits No data available Flash point No data available None known Autoignition temperature No data available None known Decomposition temperature None known pH No data available None known pH (as aqueous solution) No data available No information available Kinematic viscosity No data available None known Dynamic viscosity No data available None known Water solubility No data available None known Solubility(ies) Chloroform, Methanol, slightly soluble Partition coefficient No data available None known Vapour pressure No data available None known Relative density No data available None known Bulk density No data available Relative vapour density No data available Flash point No data available None known Particle characteristics Particle Size No information available Particle Size Distribution No information available 9.2. Other information Molecular weight 176.35 Molecular formula C8D18N2O 9.2.1. Information with regards to physical hazard classes Not applicable 9.2.2. Other safety characteristics No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity No information available.
10.2. Chemical stability
Stability Stable under normal conditions.
Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.
10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Possibility of hazardous reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid
Conditions to avoid None known based on information supplied.
10.5. Incompatible materials
Incompatible materials None known based on information supplied.
Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION



11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on likely routes of exposure Product Information Inhalation Specific test data for the substance or mixture is not available. Eye contact Specific test data for the substance or mixture is not available. Skin contact Specific test data for the substance or mixture is not available. Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components). Symptoms related to the physical, chemical and toxicological characteristics Symptoms No information available. Numerical measures of toxicity No information available Acute toxicity Delayed and immediate effects as well as chronic effects from short and long-term exposure Skin corrosion/irritation No information available. Serious eye damage/eye irritation No information available. Respiratory or skin sensitisation No information available. Germ cell mutagenicity No information available. Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer. Reproductive toxicity No information available. STOT - single exposure No information available. STOT - repeated exposure No information available. STOT - repeated exposure No information available. Aspiration hazard No information available. 11.2. Information on other hazards 11.2.1. Endocrine disrupting properties Endocrine disrupting properties No information available. 11.2.2. Other information Other adverse effects No information available Skin corrosion/irritation No information available.

Other adverse effects No information available

12. ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity The environmental impact of this product has not been fully investigated. 12.2. Persistence and degradability Persistence and degradability No information available. 12.3. Bioaccumulative potential Bioaccumulation No information available. 12.4. Mobility in soil No information available. Mobility in soil No information available. 12.5. Results of PBT and vPvB assessment PBT and vPvB assessment No information available. 12.6. Endocrine disrupting properties Endocrine disrupting properties No information available. 12.7. Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Contaminated packaging Do not reuse empty containers.



14. TRANSPORT INFORMATION

IATA

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable 14.6 Special precautions for user
- Special Provisions None
- ÌMDG
- 14.1 UN number or ID number Not regulated 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) Not regulated

- 14.4 Packing group Not regulated 14.5 Marine pollutant Not applicable 14.6 Special precautions for user

- Special Provisions None No information available
- 14.7 Maritime transport in bulk according to IMO instruments
- No information available
- RID
- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

- 14.6 Special precautions for user
- Special Provisions None
- ADR
- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated 14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

- 14.6 Special precautions for user
- Special Provisions None

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Water hazard class (WGK) non-hazardous to water (nwg) European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents

af work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This

product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII) DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors Not applicable

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA Contact supplier for inventory compliance status DSL/NDSL Contact supplier for inventory compliance status

EINECS/ELINCS Contact supplier for inventory compliance status

ENCS Contact supplier for inventory compliance status IECSC Contact supplier for inventory compliance status

KECL Contact supplier for inventory compliance status

PICCS Contact supplier for inventory compliance status

AICS Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances



KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances 15.2. Chemical safety assessment Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!