

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 12 Dec 2024

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

1.1. Product name:

N-Nitrosodiethylamine

1.1. Catalog No.:

684141

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 3 - (H301) Carcinogenicity Category 1B - (H350) Chronic aquatic toxicity Category 3 - (H412)

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2. Label Elements Contains N-Nitrosodiethylamine Signal word Danger Hazard statements



Santa Cruz Biotechnology, Inc. 10410 Finnell Street Dallas, TX 75220 831.457.3800 800.457.3801 Sott@scht.com Santa Cruz Biotechnology, Inc. Bergheimer Str. 89-2 69115 Heidelberg, Germany +49.6221.4503 0 +1.800.457.3801 europe@scht.com H301 - Toxic if swallowed H305 - May cause cancer H412 - Harmful to aquatic life with long lasting effects Precautionary Statements - EU (§28, 1272/2008) P264 - Wash face, hands and any exposed skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P321 - Specific treatment (see Emergency Phone Number on this label) P330 - Rinse mouth P405 - Store locked up P501 - Dispose of contents/ container to an approved waste disposal plant P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P281 - Use personal protective equipment as required P308 + P313 - IF exposed or concerned: Get medical advice/attention P273 - Avoid release to the environment 2.3. Other Hazards

Other hazards Harmful to aquatic life

General Hazards Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Chemical name: N-Nitrosodiethylamine EC No: Present Weight-%: 100 Classification according to Regulation (EC) No. 1272/2008 [CLP]: Acute Tox. 3 (H301) Carc. 1B (H350) Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)

3.1.1. Formula C4H10N2O



3.1.2. Molecular Weight (g/mol)

102.14

3.1.3. CAS-No.

55-18-5

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice Consult a physician if necessary. Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Skin Contact Wash skin with soap and water.

Eye contact Wash with plenty of water. Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water. 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 physicians 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.
 5.2. Special hazards arising from the substance or mixture
 Specific hazards arising from the environment. chemical flammable Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). 5.3. Advice for firefighters Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures Personal precautions Remove all sources of ignition. Use personal protective equipment as required.



For emergency responders Use personal protection recommended in Section 8. 6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

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 Soak up with inert absorbent material. 6.4. Reference to other sections See Section 12: ECOLOGICAL INFORMATION.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling Advice on safe handling Possibly Carcinogenic. General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. 7.2. Conditions for safe storage, including any incompatibilities Storage Conditions Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). 7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material 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. Chemical name: N-Nitrosodiethylamine 55-18-5 European Union United Kingdom France Spain Germany: Skin Austria: Skin Switzerland: Skin TWA: 0.001 mg/m3 Poland Norway Ireland Derived No Effect Level (DNEL) No information available Predicted No Effect Concentration (PNEC) No information available. 8.2. Exposure controls Engineering Controls Showers Eyewash stations Ventilation systems Eye/face protection Wear safety glasses with side shields (or goggles). Skin and Body Protection Wear protective gloves and protective clothing. Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Environmental exposure controls No information available.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State liquid Appearance No information available Odor No information available Property Values pH No information available Melting point/freezing point -15.60 °C Boiling point 177 °C Flash point No information available Liquid Density 0.95 g/mL Evaporation rate No information available Upper flammability limits No information available Lower flammability limit No information available Vapor pressure 1.7 mmHg Vapor density No information available Specific gravity No information available Solubility in other solvents No information available Partition coefficient 0.48 Autoignition temperature No information available Explosive properties No information available Explosive properties No information available Oxidizing properties No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity Not applicable
10.2. Chemical stability
Stability Stable under recommended storage conditions.
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.
10.3. Possibility of hazardous reactions
Hazardous polymerization No information available.
Possibility of Hazardous Reactions None under normal processing.
10.4. Conditions to avoid
Conditions to avoid Extremes of temperature and direct sunlight.
10.5. Incompatible materials
Incompatible materials Strong oxidizing agents.
10.6. Hazardous decomposition products
Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects Acute toxicity Product Information Product does not present an acute toxicity hazard based on known or supplied information. Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity. The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) 220.00 mg/kg Chemical name: N-Nitrosodiethylamine Oral LD50 = 220 mg/kg (Rat) Dermal LD50 Inhalation LC50 Chemical name: N-Nitrosodiethylamine 55-18-5 ACGIH: -IARC: Group 2A



NTP: Reasonably Anticipated

OSHA: X

IARC (International Agency for Research on Cancer) Group 2A - Probably Carcinogenic to Humans NTP (National Toxicology Program) Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity May cause long lasting harmful effects to aquatic life. Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment. 12.2. Persistence and degradability Persistence and degradability No information available. 12.3. Bioaccumulative potential Bioaccumulation No information available. 12.4. Mobility in soil Mobility No information available. 12.5. Results of PBT and vPvB assessment PBT and vPvB assessment No information available. 12.6. Other adverse effects Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated packaging Do not reuse container.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

14.1 UN/ID no RID / ADR UN2810 IMDG UN2810 ICAO (Luft) / IATA UN2810 14.2 Proper shipping name RID / ADR Toxic liquid, organic, n.o.s. IMDG Toxic liquid, organic, n.o.s. ICAO (Luft) / IATA Toxic liquid, organic, n.o.s. 14.3 Hazard Class RID / ADR 6.1 IMDG 6.1 ICAO (Luft) / IATA 6.1 Subsidiary hazard class / Labels RID / ADR -IMDG -ICAO (Luft) / IATA -14.4 Packing Group



RID / ADR III IMDG III ICAO (Luft) / IATA III 14.5 Environmental Hazard RID / ADR -IMDG -ICAO (Luft) / IATA -14.6 Special Provisions RID / ADR 274, 614; Classification code T1; Tunnel restriction code (E) IMDG 223, 274; EmS-No F-A, S-A ICAO (Luft) / IATA A3, A4, A137; ERG Code 6L

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture National Regulations 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 at work International Inventories All of the components in the product are on the following Inventory lists TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Chemical name: N-Nítrosodiethylamine TSCA: X DSL: X NDSL: -EINECS: X ELINCS: -ENCS: -IECSC: -KECL: -PICCS: -AICS: -X - Listed DSL/NDSL - Canadian Domestic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List 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 15.2. Chemical safety assessment Chemical Safety Report No information available

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!