

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 25/03/2015 Revision date: : Version: 1.0

DLM-2130-S

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

1.1. Product identifier

Product form : Mixtures

Product name : N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

Product code : DLM-2130-S

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Carc. 2 H351
STOT SE 3 H335
STOT SE 3 H336
STOT RE 2 H373

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.3; R40 T; R39/23/24/25 Xn; R22 Xi; R36/38

Full text of R-phrases: see section 16

GHS-US classification

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Carc. 2 H351
STOT SE 3 H335
STOT SE 3 H336
STOT RE 2 H373

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

Liver, Pancreas, Blood, Central nervous system, Heart, Kidney. Inhalation: anesthetic effects, nausea and drunkeness. Suspected of causing cancer (in contact with skin, if swallowed, if inhaled). May cause damage to organs (liver, blood, central nervous system) through prolonged or repeated exposure (if swallowed, if inhaled). May cause drowsiness or dizziness. Harmful in contact with skin. Harmful if swallowed. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS08

Signal word (CLP) : Warning

Hazardous ingredients : METHYLENE CHLORIDE-D2 (D, 99.8%)

Hazard statements (CLP) : H302+H312 - Harmful if swallowed or in contact with skin

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer (in contact with skin, if inhaled, if swallowed)

H373 - May cause damage to organs through prolonged or repeated exposure (in contact with

skin, if inhaled, if swallowed)

Precautionary statements (CLP) : P260 - Do not breathe fume, mist, spray, vapours

P264 - Wash both hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, face protection, protective clothing, protective gloves P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P302+P352 - IF ON SKIN: Wash with plenty of water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

GHS-US labelling

Hazard pictograms (GHS-US)





Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302+H312 - Harmful if swallowed or in contact with skin

H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation H336 - May cause drowsiness or dizziness

H351 - Suspected of causing cancer (Dermal, Inhalation, oral)

H373 - May cause damage to organs through prolonged or repeated exposure (Dermal,

Inhalation, oral)

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
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell

P302+P352 - If on skin: Wash with plenty of water/...

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

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

P312 - Call a poison center/doctor/... if you feel unwell

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P314 - Get medical advice/attention if you feel unwell

P321 - Specific treatment (see supplemental first aid instruction on this label)

P330 - Rinse mouth

P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P362+P364 - Take off contaminated clothing and wash it before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

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

Classification according to

STOT SE 3, H335 STOT RE 2, H373

H331 Carc. 1A, H350

0.0734

Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Inhalation:dust,mist),

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

2.3. Other hazards

PBT: not relevant - no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Name

3.2. Mixtures

| Name | 1 Toddot Identifier | 70 | Directive 67/548/EEC |
|----------------------------------|--|---------|---|
| METHYLENE CHLORIDE-D2 (D, 99.8%) | (CAS No) 1665-00-5 (EC No) 216-776-0 (Unlabeled) (EC Index No) 602-004-00-3 (Unlabeled) (REACH-no) 01-2119480404-41 | 99.9266 | Xi; R36/37/38 Carc.Cat.3; R40 T; R48/25 R67 Xn; R21/22 |
| N-NITROSODIMETHYLAMINE (D6, 98%) | (CAS No) 17829-05-9 (EC No) 200-549-8 (Unlabeled) (EC Index No) 612-077-00-3 (Unlabeled) | 0.0734 | Carc.Cat.1; R45 T+; R26 T; R25 N; R51/53 R48 |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| METHYLENE CHLORIDE-D2 (D, 99.8%) | (CAS No) 1665-00-5 (EC No) 216-776-0 (Unlabeled) (EC Index No) 602-004-00-3 (Unlabeled) (REACH-no) 01-2119480404-41 | 99.9266 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 |

Product identifier

| | | | STOT RE 1, H372 Aquatic Chronic 2, H411 |
|----------------------------------|--------------------|---------|---|
| Name | Product identifier | % | GHS-US classification |
| METHYLENE CHLORIDE-D2 (D, 99.8%) | (CAS No) 1665-00-5 | 99.9266 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335 |

(CAS No) 17829-05-9 (EC No) 200-549-8 (Unlabeled) (EC Index No) 612-077-00-3 (Unlabeled)

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

N-NITROSODIMETHYLAMINE (D6, 98%)

| 4.1. | Description of first aid measures | | |
|-----------|-----------------------------------|---|---|
| First-aid | measures general | : | IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. |
| First-aid | measures after inhalation | : | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. |
| First-aid | measures after skin contact | : | Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove/Take |

off immediately all contaminated clothing.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries : May cause drowsiness or dizziness.

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment as required. Ventilate spillage area. Do not breathe dust,

fume, gas, mist, spray, vapours. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For containment : Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable,

closed containers for disposal.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store refrigerated (-5 C to 5 C). Protect from light.

7.3. Specific end use(s)

No additional information available

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Control parameters

SECTION 8: Exposure controls/personal protection

N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

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| Italy - Portugal - USA ACGIH | ACGIH TWA (pp | om) | 50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) |
|--------------------------------------|--------------------------|------------------------------|--|
| Italy - Portugal - USA ACGIH | Remark (ACGIH) | | Central Nervous system impairment. Carboxyhemoglobinemia. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Confirmed animal carcinogen with unknown relevance to humans. Potential Occupational Carcinogen See Appendix A. |
| METHYLENE CHLORIDE-D2 | (D, 99.8%) (1665- | 00-5) | |
| Italy - Portugal - USA ACGIH | ACGIH TWA (pp | om) | 50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) |
| Italy - Portugal - USA ACGIH | Remark (ACGIH) | | Central Nervous system impairment. Carboxyhemoglobinemia. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Confirmed animal carcinogen with unknown relevance to humans. Potential Occupational Carcinogen See Appendix A. |
| USA OSHA | OSHA PEL (STE | EL) (mg/m³) | 435 mg/m³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202 |
| USA OSHA | OSHA PEL (STE | EL) (ppm) | 125 ppm Basis: OSHA Specifially Regulated Chemicals/Carcinogens California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202 |
| USA OSHA | OSHA PEL (Cei | ling) (mg/m³) | 87 mg/m³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202 |
| USA OSHA | OSHA PEL (Ceiling) (ppm) | | 25 ppm Basis: OSHA Specifically Regulated Chemicals/Carcinogens California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202 |
| USA OSHA | Remark (OSHA) | | Substance listed; for mor information see OSHA document 1910.1052. See Table Z-2. This section applies to all occupational exposures to methylene chloride (MC). Chemical Abstracts Service Registry Number 75-09-2, in general industry, construction and shipyard employment. Methylene chloride (MC) means an organic compound with chemical formula CH2Cl2. Its Chemical Abstracts Service Registry Number is 75-09-2. Its molecular weight is 8.9 g/mole. OSHA Specifically regulated carcinogen. |
| N-NITROSODIMETHYLAMIN | E (D6, 98%) 1 MG | /ML IN METHYLENE CHLORIDE-D2 | |
| DNEL/DMEL (Workers) | | | |
| Acute - systemic effects, inhal | ation | 706 mg/m³ | |
| Acute - local effects, inhalation | 1 | 353 mg/m³ | |
| Long-term - systemic effects, | | 4750 mg/kg bodyweight/day | |
| DNEL/DMEL (General popular | tion) | | |
| Acute - systemic effects, inhal | ation | 353 mg/m³ | |
| Acute - local effects, inhalation | 1 | 88.3 mg/m³ | |
| Long-term - systemic effects,c | ral | 0.06 mg/kg bodyweight/day | |
| Long-term - systemic effects, dermal | | 2395 mg/kg bodyweight/day | |
| PNEC (Water) | | | |
| PNEC aqua (freshwater) | | 0.54 mg/l | |
| PNEC aqua (marine water) | | 0.194 mg/l | |
| PNEC aqua (intermittent, fresl | nwater) | 0.27 mg/l | |
| PNEC (Sediment) | | | |
| PNEC sediment (freshwater) | | 4.47 mg/kg dwt | |
| PNEC sediment (marine wate | r) | 1.61 mg/kg dwt | |
| PNEC (Soil) | | | |
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| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|-----------------|
| PNEC soil | 0.583 mg/kg dwt |
| PNEC (STP) | |
| PNEC sewage treatment plant 26 mg/l | |

8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves. Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses. Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Liquid

Appearance : Liquid.

Molecular mass : 86.94 g/mol (Labeled)

Colour : Colourless.

Odour : Sweet, penetrating, ether-like odor.

Odour threshold : No data available pH : No data available Relative evaporation rate (butylacetate=1) : No data available

Relative evaporation rate (ether=1) : 0.71

Melting point : -97 °C (-143 °F)
Freezing point : No data available

Boiling point : 39.8 - 40 °C (103.6 - 104 °F)

Flash point : No data available

Auto-ignition temperature : $556.1 \,^{\circ}\text{C} \, (1,033.0 \,^{\circ}\text{F}); \, 622.0 \,^{\circ}\text{C} \, (1,223.6 \,^{\circ}\text{F})$

Decomposition temperature : No data available Flammability (solid, gas) : Not applicable

Vapour pressure : 470.9 hPa (353.2 mmHg) at 20 °C (68 °F)

Relative vapour density at 20 °C : 2.93 - (Air = 1.0)
Relative density : No data available

Density : 1.325 g/ml at $25 \,^{\circ}\text{C}$ (77 $^{\circ}\text{F}$) Solubility : Water: Slightly soluble

Log Pow : 1.25

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 12 - 19 % (V)

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Protect from sunlight.

10.5. Incompatible materials

Alkali metals. Aluminium. Strong oxidizing agents. Bases. Magnesium. Strong acids. Strong bases. Vinyl.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2). Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.

| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|--|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg (OECD Test Guideline 402) |
| LC50 inhalation rat (mg/l) | 52000 mg/m³ |
| ATE CLP (oral) | 500.000 mg/kg bodyweight |
| ATE CLP (dermal) | 1100.000 mg/kg bodyweight |
| ATE CLP (vapours) | 52.000 mg/l/4h |
| ATE CLP (dust,mist) | 52.000 mg/l/4h |

| METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5) | | |
|--|--|--|
| LD50 oral rat | > 2000 mg/kg | |
| LD50 dermal rat | > 2000 mg/kg (OECD Test Guideline 402) | |
| LC50 inhalation rat (mg/l) | 52000 mg/m³ | |
| ATE CLP (oral) | 500.000 mg/kg bodyweight | |
| ATE CLP (dermal) | 1100.000 mg/kg bodyweight | |
| ATE CLP (vapours) | 52.000 mg/l/4h | |
| ATE CLP (dust,mist) | 52.000 mg/l/4h | |

| N-NITROSODIMETHYLAMINE (D6, 98%) (17829-05-9) | |
|---|-------------------------|
| LD50 oral rat | 37 mg/kg |
| LC50 inhalation rat (ppm) | 78 ppm 4 h |
| ATE CLP (oral) | 37.000 mg/kg bodyweight |
| ATE CLP (dust,mist) | 0.500 mg/l/4h |

Skin corrosion/irritation : Skin. rabbit. Irritating to skin. Result: 24 Hours

Serious eye damage/irritation : Eyes. rabbit. Result: Irritating to eyes. 24 Hours. (Draize Test)

Respiratory or skin sensitisation : Not available
No data available
Germ cell mutagenicity : rat. DNA Damage

Carcinogenicity : Carcinogenicity. rat. Inhalation. Tumorigenic: Carcinogenic by RTECS criteria. endocrine

system. Tumors. Limited evidence of a carcinogenic effect. Suspected human carcinogens

Reproductive toxicity : Not available

STOT-single exposure : May cause respiratory irritation. May cause drowsiness or dizziness

STOT-repeated exposure : Inhalation. May cause damage to organs (central nervous system) through prolonged or

repeated exposure (Inhalation). Oral

Aspiration hazard : Not classified

Potential adverse human health effects and

symptoms

: Harmful if swallowed. Harmful in contact with skin.

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant

health hazard. Harmful in contact with skin. Causes skin irritation.

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Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|---|
| LC50 fish 1 | 193 mg/l Pimephales promelas (fathead minnow) - 96 h |
| EC50 Daphnia 1 | 1682 mg/l Daphnia magna (Water flea) - 48 h |
| NOEC (chronic) | 130 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h |
| METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5) | |
| LC50 fish 1 | 193 mg/l Pimephales promelas (fathead minnow) - 96 h |
| EC50 Daphnia 1 | 1682 mg/l Daphnia magna (Water flea) - 48 h |
| NOEC (chronic) | 130 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h |
| N-NITROSODIMETHYLAMINE (D6, 98%) (17829-05-9) | |
| LC50 fish 1 | 832 - 1062 mg/l Pimephales promelas (fathead minnow) - 96 h |
| ErC50 (algae) | 4 mg/l Pseudokirchneriella subcapitata (green algae) - 96 h |

12.2. Persistence and degradability

| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|--|
| Biodegradation | < 26 % - Not readily biodegradable. (OECD Test Guideline 301C) |
| METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5) | |
| Biodegradation | < 26 % - Not readily biodegradable. (OECD Test Guideline 301C) |

N-NITROSODIMETHYLAMINE (D6, 98%) (17829-05-9)

Persistence and degradability Not available.

12.3. Bioaccumulative potential

| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|-----------------------------------|
| Log Pow | 1.25 |
| Bioaccumulative potential | Does not accumulate in organisms. |

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5) Log Pow 1.2

Bioaccumulative potential Does not accumulate in organisms.

12.4. Mobility in soil

N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

Ecology - soil Not available.

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)

Ecology - soil Not available.

12.5. Results of PBT and vPvB assessment

N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

PBT: not relevant - no registration required

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)

PBT: not relevant - no registration required

12.6. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and Local

environmental control regulations.

Product/Packaging disposal recommendations: : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Dispose of as unused product.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1593 DOT NA no. UN1593

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Dichloromethane

Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Hazard labels (DOT) : 6.1 - Poison



Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102)

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55

C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

2 for UN2672).

IP8 - Ammonia solutions may be transported in rigid or composite plastic IBCs (31H1, 31H2 and 31HZ1) that have successfully passed, without leakage or permanent deformation, the hydrostatic test specified in 178.814 of this subchapter at a test pressure that is not less than

1.5 times the vapor pressure of the contents at 55 C (131 F).

N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated

hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal...... 178.275(d)(3)

(59 F) and 50 C (122 F), respectively.

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C

DOT Packaging Exceptions (49 CFR 173.xxx) : 153
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III

Class (ADR) : 6.1 - Toxic substances

Hazard identification number (Kemler No.) : 60 Classification code (ADR) : T1

Danger labels (ADR) : 6.1 - Toxic substances



Orange plates

60 1593

Tunnel restriction code (ADR) : E Limited quantities (ADR) 51 EAC code : 2Z

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Excepted quantities (ADR) : E1

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

MFAG-No : 160

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

Civil Aeronautics Law : Toxic and infectious substances/Toxic substances(Hazardous materials notice Appended Table

1 Article 194 of the Enforcement Regulations)

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

14.6. 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

| N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 | |
|---|---|
| Subject to reporting requirements of United States SARA Section 313 | |
| SARA Section 302 Threshold Planning Quantity (TPQ) Not subject to reporting requirements of the United States SARA Section 302. | |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard |

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)

| Subject to reporting requirements of United States | s SARA Section 313 |
|--|--|
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporting requirements of the United States SARA Section 302. |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard |

15.2. International regulations

CANADA

N-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

Listed on the Canadian DSL (Domestic Substances List)

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

| I-NITROSODIMETHYLAMINE (D6, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2() | | |
|---|--|--|
| U.S California - Proposition 65 - Carcinogens List | Yes | |
| U.S California - Proposition 65 - Developmental Toxicity | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Male | No | |
| State or local regulations | U.S Massachusetts - Right To Know List | |

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| | | U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List | | | |
|--|--|---|---|----------------------------------|--|
| METHYLENE CHLORII | METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5) | | | | |
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | |
| Yes | No | No | No | | |

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)

State or local regulations

- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

N-NITROSODIMETHYLAMINE (D6. 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2()

SECTION 16: Other information

Other information

This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-statements:

| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 3 |
|-------------------------------------|--|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Carc. 1A | Carcinogenicity, Category 1A |
| Carc. 2 | Carcinogenicity, Category 2 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 1 | Specific target organ toxicity — Repeated exposure, Category 1 |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H331 | Toxic if inhaled |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H350 | May cause cancer |
| H351 | Suspected of causing cancer |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H411 | Toxic to aquatic life with long lasting effects |
| R21/22 | Harmful in contact with skin and if swallowed |
| R22 | Harmful if swallowed |
| R25 | Toxic if swallowed |
| R26 | Very toxic by inhalation |
| R36/37/38 | Irritating to eyes, respiratory system and skin |
| R36/38 | Irritating to eyes and skin |
| R39/23/24/25 | Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed |
| R40 | Limited evidence of a carcinogenic effect |
| R45 | May cause cancer |
| R48 | Danger of serious damage to health by prolonged exposure |
| R48/25 | Toxic: danger of serious damage to health by prolonged exposure if swallowed |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R67 | Vapours may cause drowsiness and dizziness |
| | |

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| N | Dangerous for the environment |
|----|-------------------------------|
| Т | Toxic |
| T+ | Very toxic |
| Xi | Irritant |
| Xn | Harmful |

NFPA health hazard

2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

3 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

3 - Materials that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard

CIL Mixture SDS

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

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