

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: 27/03/2015 Revision date: 10/10/2019 Supersedes: 27/03/2015 Version: 1.1

DLM-2131-S

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

1.1. Product identifier

Product form : Mixtures

Product name : N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

 CAS-No.
 : 93951-96-3

 Product code
 : DLM-2131-S

 Formula
 : (C3D7)2NNO

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 <u>cilsales@isotope.com</u> 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

10/10/2019 EN (English US) 1/12

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

STOT RE 2 H3

Full text of H statements : see section 16

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

Signal word (CLP)

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

Hazard pictograms (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 (liver, pancreas, blood, central nervous system, heart, kidneys) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP) : P260 - Do not breathe dust, mist, spray, vapors.

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 labeling

Signal word (GHS-US)

Hazard pictograms (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 (liver, pancreas, blood, central nervous system, heart,

kidneys) 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 fume, mist, spray, vapors.
P261 - Avoid breathing fume, mist, spray, vapors.
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 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

10/10/2019 EN (English US) 2/12

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

lenses, if present and easy to do. Continue rinsing

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

P312 - Call a poison center or doctor if you feel unwell

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

P321 - Specific treatment (see Hazard pictograms (CLP) 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 Comply with applicable regulations

Other hazards

PBT: not relevant - no registration required

SECTION 3: Composition/Information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	Classification according to 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-NITROSO-DI-N-PROPYLAMINE (D14, 98%)	(CAS-No.) 93951-96-3 (EC-No.) 210-698-0 (Unlabeled) (EC Index-No.) 612-098-00-8 (Unlabeled)	0.0734	Carc.Cat.1; R45 Carc.Cat.1; R49 Xn; R22 N; R51/53
Name	Product identifier	%	Classification according to Regulation (EC) No.

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 STOT SE 3, H335 STOT RE 2, H373
N-NITROSO-DI-N-PROPYLAMINE (D14, 98%)	(CAS-No.) 93951-96-3 (EC-No.) 210-698-0 (Unlabeled) (EC Index-No.) 612-098-00-8 (Unlabeled)	0.0734	Acute Tox. 4 (Oral), H302 Carc. 1B, H350 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 STOT RE 2. H373

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

SECTION 4: First aid measures

Description of first aid measures

: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if First-aid measures general 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. Rinse skin with water/shower.

10/10/2019 EN (English US) 3/12

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

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/effects : May cause drowsiness or dizziness.

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

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

Symptoms/effects 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: Firefighting 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, vapors. 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

10/10/2019 EN (English US) 4/12

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)

Safety Data Sheet

Control parameters

PNEC aqua (marine water)

PNEC sediment (freshwater)
PNEC sediment (marine water)

PNEC (Sediment)

PNEC (Soil)

PNEC aqua (intermittent, freshwater)

SECTION 8: Exposure controls/personal protection

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

	1	1 MG/ML IN METHYLENE CHLORID	
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		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 (Ceiling) (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-NITPOSO-DI NI DDODVI AI	MINE (D44 000/)	1 MG/ML IN METHYLENE CHLORID	E-D2 (02051-06-2)
DNEL/DMEL (Workers)	VIIINE (D14, 90%)	I WIG/WIL IN WIE I HT LENE CHLORID	E-D2 (33331-30-3)
	ation	706 mg/m³	
Acute - systemic effects, inhalation Acute - local effects, inhalation		353 mg/m³	
Long-term - systemic effects, dermal		4750 mg/kg bodyweight/day	
DNEL/DMEL (General populat		55 mg/ng 556/ Worgin day	
Acute - systemic effects, inhala		353 mg/m³	
Acute - local effects, inhalation		88.3 mg/m³	
Long-term - systemic effects,o		0.06 mg/kg bodyweight/day	
Long-term - systemic effects, of		2395 mg/kg bodyweight/day	
PNEC (Water)		, , , , , , , , , , , , , , , , , , , ,	
PNEC aqua (freshwater)		0.54 mg/l	
,			

10/10/2019 EN (English US) 5/12

0.194 mg/l

0.27 mg/l

4.47 mg/kg dwt

1.61 mg/kg dwt

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

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)	
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)

Color : Colorless

Odor : Sweet, penetrating, ether-like odor.

Odor threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=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

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

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

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

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

Specific gravity / 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
Oxidizing properties : No data available
Explosion limits : 12 - 19 % (V)

9.2. Other information

No additional information available

10/10/2019 EN (English US) 6/12

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

SECTION 10: Stability and reactivity

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.

Conditions to avoid 10.4.

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

Incompatible materials

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

Hazardous decomposition products

Carbon oxides (CO, CO2). Hydrogen chloride.

SECTION 11: Toxicological information

Information on toxicological effects

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

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)	
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 body weight
ATE CLP (dermal)	1100,000 mg/kg body weight

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 body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (vapors)	52.000 mg/l/4h
ATF CLP (dust. mist)	52 000 mg/l/4h

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) (93951-96-3)	
LD50 oral rat	480 mg/kg
ATE CLP (oral)	480.000 mg/kg body weight

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 sensitization 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

Specific target organ toxicity - single exposure May cause respiratory irritation. May cause drowsiness or dizziness

Specific target organ toxicity - 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/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

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

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

Symptoms/effects after eye contact : Causes serious eve irritation.

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

10/10/2019 EN (English US) 7/12

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

SECTION 12: Ecological information

12.1. Toxicity

Biodegradation

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)	
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)	

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

12.2. Persistence and degradability

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)	
Biodegradation	< 26 % - Not readily biodegradable. (OECD Test Guideline 301C)
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	

< 26 % - Not readily biodegradable. (OECD Test Guideline 301C)

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) (93951-96-3)

Persistence and degradability Not available.

12.3. Bioaccumulative potential

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)	
Log Pow	1.25
Bioaccumulative potential	Does not accumulate in organisms.

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-	
Log Pow	1 25

Bioaccumulative potential Does not accumulate in organisms.

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) (93951-96-3)

Bioaccumulative potential Not available.

12.4. Mobility in soil

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%)	1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)
Ecology soil	Not available

Ecology - soil Not available

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

Ecology - soil Not available.

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) (93951-96-3)

Ecology - soil Not available

12.5. Results of PBT and vPvB assessment

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)

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.

10/10/2019 EN (English US) 8/12

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

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).

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)

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

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

Hazard labels (ADR) : 6.1 - Toxic substances



Orange plates

60 1593

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

10/10/2019 EN (English US) 9/12

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

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

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-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)		
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	
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313	

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

	METHTELIAE OTLOTABLE DE (D, 50.070) (1000 00 0)	
	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 Threshold Planning		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-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2 (93951-96-3)

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

N-NITROSO-DI-N-PROPYLAMINE (D14, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2(93951-96-3)		
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 U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

10/10/2019 EN (English US) 10/12

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

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

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-phrases:

text or R-, H- and EOH-phrases:		
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. 1B	Carcinogenicity Category 1B	
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 2	Specific target organ toxicity (repeated exposure) Category 2	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
H302	Harmful if swallowed	
H312	Harmful in contact with skin	
H315	Causes skin irritation	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	
H336	May cause drowsiness or dizziness	
H350	May cause cancer	
H351	Suspected of causing cancer	
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	
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	
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed	
R49	May cause cancer by inhalation	
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment	
R67	Vapors may cause drowsiness and dizziness	
N	Dangerous for the environment	
T	Toxic	
Xi	Irritant	
Xn	Harmful	

10/10/2019 EN (English US) 11/12

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

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

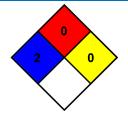
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



Hazard 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

10/10/2019 EN (English US) 12/12