



1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 12/6/2010 Revision date: 12/6/2022 Supersedes: 12/2/2013 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Substance name	: 1,2-DICHLOROETHANE-D4 (D, 99%)
Chemical name	: 1,2-Dichloroethane
IUPAC name	: 1,2-dichloroethane
CAS-No.	: 107-06-2
Product code	: DLM-18
Formula	: C ₂ H ₄ Cl ₂
Synonyms	: Ethylene dichloride / Ethylene chloride

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Cambridge Isotope Laboratories, Inc.
50 Frontage Rd
01810
ANDOVER, MA, 01810
USA
T 1-800-322-1174
cilsales@isotope.com - www.isotope.com

1.4. Emergency telephone number

Emergency number : 1-703-741-5970
Chemtrec 1-800-424-9300 24 hours

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Acute toxicity (inhalation) Category 3	H331	Toxic if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Carcinogenicity Category 1A	H350	May cause cancer
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Full text of H statements : see section 16		

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard statements (GHS US)	: H225 - Highly flammable liquid and vapor H302 - Harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation H331 - Toxic if inhaled H335 - May cause respiratory irritation H350 - May cause cancer
Precautionary statements (GHS US)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P261 - Avoid breathing dust/fume/gas/mist/vapors/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 or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P311 - Call a poison center or doctor. P312 - Call a poison center or doctor 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+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS US classification
1,2-DICHLOROETHANE-D4 (D, 99%) (Main constituent)	CAS-No.: 107-06-2	100	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 1A, H350 STOT SE 3, H335

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

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
First-aid measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Acts as a simple asphyxiant by displacing air, anesthetic effects, difficulty breathing, headache, dizziness, prolonged or repeated contact with skin may cause: defatting, dermatitis. Contact with eyes can cause: Redness, blurred vision, provokes tears. Effects due to ingestion may include: Gastrointestinal discomfort, Central nervous system depression, Paresthesia, Drowsiness, Convulsions, Conjunctivitis, Pulmonary edema. Effects may be delayed. Irregular breathing, Stomach/intestinal disorders, Nausea, vomiting, Increased liver enzymes, Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Symptoms/effects after inhalation	: Toxic if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
------------------------------	---

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO ₂). hydrogen chloride.
--	--

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

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 : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.
Storage conditions : Store at room temperature away from light and moisture.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene dichloride
ACGIH OEL TWA [ppm]	10 ppm Basis: USA. ACGIH Threshold Limit Values Remarks: Liver damage. Nausea. Not classifiable as a human carcinogen.

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
Remark (ACGIH)	TLV® Basis: Liver dam; nausea. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Ethylene dichloride (1,2-Dichloroethane)
OSHA PEL TWA [2]	50 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.21-1969.
OSHA PEL STEL [1]	8 mg/m ³ California permissible exposure limits for chemical contaminants (Title 8, Article 107)
OSHA PEL STEL [2]	2 ppm California permissible exposure limits for chemical contaminants (Title 8, Article 107)
OSHA PEL C [ppm]	100 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.21-1969.
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	200 ppm 5 mins. in any 3 hrs.
Remark (OSHA)	Component: Ethylene dichloride CAS-No.: 107-06-2 Value: Peak Control Parameters: 200 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.21-1969.; Component: Ethylene dichloride CAS-No.: 107-06-2 Value: PEL Control Parameters: 1 ppm 4 mg/m ³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107); Component: Ethylene dichloride CAS-No.: 107-06-2 Value: C Control Parameters: 200 ppm Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	4 mg/m ³ Basis: USA. NIOSH Recommended Exposure Limits Remarks: Potential Occupational Carcinogen. See Appendix C. See Appendix A.
NIOSH REL TWA [ppm]	1 ppm Basis: USA. NIOSH Recommended Exposure Limits Remarks: Potential Occupational Carcinogen. See Appendix C. See Appendix A.
NIOSH REL STEL	8 mg/m ³ Basis: USA. NIOSH Recommended Exposure Limits Remarks: Potential Occupational Carcinogen. See Appendix C. See Appendix A. See Table Z-2.
NIOSH REL STEL [ppm]	2 ppm Basis: USA. NIOSH Recommended Exposure Limits Remarks: Potential Occupational Carcinogen. See Appendix C. See Appendix A. See Table Z-2.

8.2. Appropriate engineering controls

Appropriate engineering controls	: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
Environmental exposure controls	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

8.3. Individual protection measures/Personal protective equipment

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

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Eye protection:

Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection:

When appropriate, use NIOSH/CEN approved respirator.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, Liquid.
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: -35.3 °C Source: HSDB
Freezing point	: No data available
Boiling point	: 83.5 °C Source: HSDB
Flash point	: 13 °C Source: ECHA
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 78.9 mm Hg at 25°C Source: ChemIDPlus
Vapor pressure at 50°C	: 312 hPa (234 mmHg) at 50 °C (122 °F)
Relative vapor density at 20°C	: No data available
Relative density	: 1.2455 Source: ECHA
Density	: 12455 g/cm ³ Type: 'density' Temp.: 298,15 K
Molecular mass	: 98.9596 g/mol Source: ChemIDPlus
Solubility	: Water: 7.9 g/l
Partition coefficient n-octanol/water (Log Pow)	: 1.45 Source: ECHA
Auto-ignition temperature	: 440 °C Source: ECHA
Decomposition temperature	: No data available
Viscosity, kinematic	: 0 mm ² /s
Viscosity, dynamic	: 0.831 cP Source: ECHA
Explosion limits	: 6.2 – 16.2 % (V) Upper explosion limit: 6.2 – 16 % Source: ECHA
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Avoid Heat, Flames and Sparks.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Toxic if inhaled.

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
LD50 oral rat	770 mg/kg Source: ECHA
LD50 dermal rabbit	4890 mg/kg Source: ECHA
ATE US (oral)	770 mg/kg body weight
ATE US (dermal)	4890 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3.879 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer.

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
NOAEL (oral,rat,90 days)	37.5 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
Aspiration hazard	: Not classified
Viscosity, kinematic	: 0 mm ² /s
Potential Adverse human health effects and symptoms	: Acts as a simple asphyxiant by displacing air, anesthetic effects, difficulty breathing, headache, dizziness, prolonged or repeated contact with skin may cause: defatting, dermatitis. Contact with eyes can cause: Redness, blurred vision, provokes tears. Effects due to ingestion may include: Gastrointestinal discomfort, Central nervous system depression, Paresthesia, Drowsiness, Convulsions, Conjunctivitis, Pulmonary edema. Effects may be delayed. Irregular breathing, Stomach/intestinal disorders, Nausea, vomiting, Increased liver enzymes, Weakness, Heavy or prolonged skin exposure may result in the absorption of harmful amounts of material. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Symptoms/effects after inhalation	: Toxic if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
LC50 - Fish [1]	1.8 mg/l Source: ECHA
EC50 - Crustacea [1]	180 mg/l Source: ECHA
EC50 - Crustacea [2]	180 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	21 mg/l Test organisms (species): Daphnia magna Duration: '28 d'
NOEC (acute)	130 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h
NOEC chronic fish	29 mg/l
NOEC chronic crustacea	1.02 mg/l
NOEC chronic algae	55 mg/l

12.2. Persistence and degradability

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
Persistence and degradability	Biotic/Aerobic. - Exposure time 21 d.
Biodegradation	< 20 % - Not readily biodegradable. Remarks: Not applicable

12.3. Bioaccumulative potential

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)	
BCF - Fish [1]	95.6 ug/l - Lepomis macrochirus (Bluegill) - 14 d
Bioconcentration factor (BCF REACH)	2
Partition coefficient n-octanol/water (Log Pow)	1.45 Source: ECHA

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.4. Mobility in soil

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

Ecology - soil	Not available.
----------------	----------------

12.5. Other adverse effects

Other adverse effects : Not available.

SECTION 13: Disposal considerations

13.1. Disposal 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 : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1184
UN-No. (TDG) : UN1184
UN-No. (IMDG) : 1184
UN-No. (IATA) : 1184

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Ethylene dichloride
Proper Shipping Name (TDG) : ETHYLENE DICHLORIDE
Proper Shipping Name (IMDG) : ETHYLENE DICHLORIDE
Proper Shipping Name (IATA) : Ethylene dichloride

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3 (6.1)
Hazard labels (DOT) : 3, 6.1



TDG

Transport hazard class(es) (TDG) : 3 (6.1)
Hazard labels (TDG) : 3, 6.1



1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IMDG

Transport hazard class(es) (IMDG) : 3 (6.1)
Hazard labels (IMDG) : 3, 6.1



IATA

Transport hazard class(es) (IATA) : 3 (6.1)
Hazard labels (IATA) : 3, 6.1



14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No. (DOT) : UN1184
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
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)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 243
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

TDG

UN-No. (TDG) : UN1184
Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Passenger Carrying Road Vehicle or Passenger : 1 L
Carrying Railway Vehicle Index
Emergency Response Guide (ERG) Number : 131

IMDG

Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2
Segregation (IMDG) : SGG10
Flash point (IMDG) : 13°C c.c.
Properties and observations (IMDG) : Colourless liquid with a chloroform-like odour. Flashpoint: 13°C c.c. Explosive limits: 6.2% to 15.9% Immiscible with water. Toxic by inhalation. Irritating to skin, eyes and mucous membranes.
MFAG-No : 131

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 352
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 3P

14.7. 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

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
1,2-DICHLOROETHANE-D4 (D, 99%)	107-06-2	Present	Active	

1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on TECI (Thailand Existing Chemicals Inventory)

15.3. US State regulations

1,2-DICHLOROETHANE-D4 (D, 99%) (107-06-2)

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
No significant risk level (NSRL)	10 µg/day
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date

: 12/06/2022

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 H-phrases	
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation

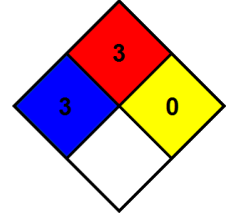
1,2-DICHLOROETHANE-D4 (D, 99%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases	
H350	May cause cancer

- NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- 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 : 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB IC)
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Safety Data Sheet (SDS), USA

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.