



Benzene-D₆ (D, 99%) reagent grade

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 12/15/2010 Revision date: 4/17/2024 Supersedes: 10/24/2023 Version: 4.0

SECTION 1: Identification

1.1. Identification

Product form : Substance
Substance name : Benzene-D₆ (D, 99%) reagent grade
CAS-No. : 71-43-2
Product code : DLM-1RG
Formula : C₆D₆

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 |
| Skin corrosion/irritation Category 2 | H315 | Causes skin irritation |
| Germ cell mutagenicity Category 1B | H340 | May cause genetic defects (Inhalation, Dermal, oral) |
| Carcinogenicity Category 1A | H350 | May cause cancer (Inhalation, Dermal, oral) |
| Aspiration hazard Category 1 | H304 | May be fatal if swallowed and enters airways |

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
Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H340 - May cause genetic defects (Inhalation, Dermal, oral)
H350 - May cause cancer (Inhalation, Dermal, oral)
Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

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P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, open flames, sparks
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective clothing, protective gloves.
P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER.
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.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see Hazardous component(s) for labeling on this label).
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
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

| Name | Product identifier | % | GHS US classification |
|---|--------------------|-----|--|
| Benzene-D ₆ (D, 99%) reagent grade (Main constituent) | CAS-No.: 71-43-2 | 100 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1A, H350 Asp. Tox. 1, H304 |

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 : If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.

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| | |
|---------------------------------------|---|
| First-aid measures after skin contact | : Wash with plenty of soap and water. Get immediate medical advice/attention. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Gently wash with plenty of soap and water, Get immediate medical advice/attention. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label). |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. |
| First-aid measures after ingestion | : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention. Immediately call a poison center or doctor/physician. |

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

| | |
|---|--|
| Potential Adverse human health effects and symptoms | : 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. Dizziness. Headache. Nausea. Narcosis. Inhalation of high concentrations of benzene may have an initial stimulatory effect on the central nervous system characterized by exhilaration, nervous excitation and/or giddiness, depression, drowsiness, or fatigue. The victim may experience tightness in the chest, breathlessness, and loss of consciousness. Tremors, convulsions and death due to respiratory paralysis or circulatory collapse can occur in a few minutes to several hours following severe exposures. Aspirations of small amounts of liquid immediately causes pulmonary edema and hemorrhage of pulmonary disease. Direct skin contact may cause erythema. Repeated or prolonged skin contact may result in drying, scaling dermatitis or development of secondary skin infections. The chief target organ is the hematopoietic system. Bleeding from the nose, gums, or mucous membranes and the development of purpuric spots, pancytopenia, leukopenia, thrombocytopenia, aplastic anemia and leukemia may occur as the condition progresses. The bone marrow may appear normal, aplastic or hyperplastic and may not correlate with peripheral blood-forming tissues. The onset of effects of prolonged benzene exposure may be delayed for months or years after the actual exposure has ceased. Blood disorders. |
| Symptoms/effects | : May cause genetic defects (if inhaled, in contact with skin, if swallowed). |
| Symptoms/effects after inhalation | : May be harmful if inhaled. May cause respiratory irritation. May cause cancer by inhalation. |
| Symptoms/effects after skin contact | : Causes skin irritation. |
| Symptoms/effects after eye contact | : May cause eye irritation. |
| Symptoms/effects after ingestion | : May be fatal if swallowed and enters airways. |

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 | : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂). |
|------------------------------|--|

5.2. Specific hazards arising from the chemical

| | |
|------------------|--|
| Fire hazard | : Highly flammable liquid and vapor. |
| Explosion hazard | : Flash back possible over considerable distance. Container explosion may occur under fire conditions. May form flammable/explosive vapor-air mixture. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment. |
| Other information | : Use water spray to cool exposed surfaces. |

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Use personal protective equipment as required. Avoid breathing dust, fume, gas, mist, spray, vapors. Ensure adequate air ventilation. Eliminate all ignition sources if safe to do so. Evacuate unnecessary personnel. Special attention should be given to low areas/pits where flammable vapors can accumulate.

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

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Vacuum with an equipment that avoids ignition risk. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

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

Additional hazards when processed : Avoid all eye and skin contact and do not breathe vapor and mist. Keep away from sources of ignition - No smoking. Use explosion-proof equipment. Take precautionary measures against static discharges. Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapor concentrations. No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Lighting equipment, ventilating equipment.

Storage conditions : Store at room temperature away from light and moisture.

Incompatible materials : Heat sources.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|--|---|
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Benzene |
| ACGIH OEL TWA [ppm] | 0.5 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices. |
| ACGIH OEL STEL [ppm] | 2.5 ppm Leukemia Substances for which there is a Biological Exposure Index or Indices. |
| Remark (ACGIH) | TLV® Basis: Leukemia. Notations: Skin; A1 (Confirmed Human Carcinogen); BEI |
| Regulatory reference | ACGIH 2022 |
| USA - ACGIH - Biological Exposure Indices | |
| Local name | BENZENE |
| BEI | 25 µg/g Kreatinin Parameter: S-Phenylmercapturic acid - Medium: urine - Sampling time: End of shift - Notations: B 500 µg/g Kreatinin Parameter: t,t-Muconic acid - Medium: urine - Sampling time: End of shift - Notations: B |
| Regulatory reference | ACGIH 2022 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Benzene |
| OSHA PEL TWA [2] | 10 ppm |
| OSHA PEL C [ppm] | 25 ppm |
| Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift | 50 ppm 10 mins. |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-2 |

8.2. Appropriate engineering controls

| | |
|----------------------------------|---|
| Appropriate engineering controls | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| Environmental exposure controls | : Avoid release to the environment. |

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 |
| Eye protection: |
| Wear eye protection. Chemical goggles or face shield with safety glasses |
| Skin and body protection: |
| Wear suitable protective clothing, gloves and eye/face protection. Wear suitable protective clothing |

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Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator. Wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Liquid |
| Appearance | : Liquid. |
| Color | : Colorless |
| Odor | : No data available |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : 5.5 °C Source: ChemIDplus |
| Freezing point | : No data available |
| Boiling point | : 80 °C Source: ChemIDplus |
| Flash point | : -11 °C Source: ICSC |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Highly flammable liquid and vapor. |
| Vapor pressure | : 10 kPa at 20°C Source: ECHA |
| Relative vapor density at 20°C | : 2.8 Source: HSDB |
| Relative density | : 0.877 Source: ECHA |
| Density | : 0.877 g/cm ³ Type: 'density' Temp.: 20 °C |
| Molecular mass | : 84.15 g/mol (Labeled) |
| Solubility | : Water: 1.88 g/l |
| Partition coefficient n-octanol/water (Log Pow) | : 2.13 Source: ChemIDplus,IPCS |
| Auto-ignition temperature | : 498 °C Source: ICSC |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : 0.689 mm ² /s |
| Viscosity, dynamic | : 0.604 cP Source: ECHA |
| Explosion limits | : 1.3 – 8 % (V) Upper explosion limit: 1.2 – 8 % Source: ICSC |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.2. Chemical stability

Stable if stored under recommended conditions.

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10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Open flame. Sparks.

10.5. Incompatible materials

Acids. Bases. Halogens. Metallic salts. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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| | |
|-----------------------|--------------------------------------|
| LD50 oral rat | > 2000 mg/kg Source: ECHA |
| LD50 dermal rabbit | > 8260 mg/kg Source: ECHA |
| LC50 Inhalation - Rat | 44700 mg/m ³ female - 4 h |
| ATE US (oral) | 2990 mg/kg body weight |
| ATE US (dermal) | 8263 mg/kg body weight |
| ATE US (vapors) | 44.7 mg/l/4h |
| ATE US (dust, mist) | 44.7 mg/l/4h |

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : May cause genetic defects (Inhalation, Dermal, oral).
Carcinogenicity : May cause cancer (Inhalation, Dermal, oral).

Benzene-D₆ (D, 99%) reagent grade (71-43-2)

| | |
|--|----------------------------|
| IARC group | 1 - Carcinogenic to humans |
| National Toxicology Program (NTP) Status | Known Human Carcinogens |

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic : 0.689 mm²/s

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| | |
|---|--|
| Potential Adverse human health effects and symptoms | : 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. Dizziness. Headache. Nausea. Narcosis. Inhalation of high concentrations of benzene may have an initial stimulatory effect on the central nervous system characterized by exhilaration, nervous excitation and/or giddiness, depression, drowsiness, or fatigue. The victim may experience tightness in the chest, breathlessness, and loss of consciousness. Tremors, convulsions and death due to respiratory paralysis or circulatory collapse can occur in a few minutes to several hours following severe exposures. Aspirations of small amounts of liquid immediately causes pulmonary edema and hemorrhage of pulmonary disease. Direct skin contact may cause erythema. Repeated or prolonged skin contact may result in drying, scaling dermatitis or development of secondary skin infections. The chief target organ is the hematopoietic system. Bleeding from the nose, gums, or mucous membranes and the development of purpuric spots, pancytopenia, leukopenia, thrombocytopenia, aplastic anemia and leukemia may occur as the condition progresses. The bone marrow may appear normal, aplastic or hyperplastic and may not correlate with peripheral blood-forming tissues. The onset of effects of prolonged benzene exposure may be delayed for months or years after the actual exposure has ceased. Blood disorders. |
| Symptoms/effects | : May cause genetic defects (if inhaled, in contact with skin, if swallowed). |
| Symptoms/effects after inhalation | : May be harmful if inhaled. May cause respiratory irritation. May cause cancer by inhalation. |
| Symptoms/effects after skin contact | : Causes skin irritation. |
| Symptoms/effects after eye contact | : May cause eye irritation. |
| Symptoms/effects after ingestion | : May be fatal if swallowed and enters airways. |

SECTION 12: Ecological information

12.1. Toxicity

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

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|---|---|
| LC50 - Fish [1] | 5.3 mg/l |
| LC50 - Other aquatic organisms [1] | 230 mg/l <i>Lepomis macrochirus</i> (Bluegill) - 96 h |
| EC50 - Crustacea [1] | 10 mg/l Source: OECD ECHA |
| LC50 - Fish [2] | 15 – 32 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 96 h |
| LC50 - Other aquatic organisms [2] | 9.2 mg/l <i>Daphnia magna</i> (Water flea) - 48 h |
| ErC50 algae | 29 mg/l |
| LOEC (acute) | 17.2 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 7 d |
| NOEC (chronic) | 10.2 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 7 d |
| NOEC chronic fish | 0.8 mg/l |

12.2. Persistence and degradability

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|---|------------------------|
| Persistence and degradability | Readily biodegradable. |

12.3. Bioaccumulative potential

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|---|-------------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 2.13 Source: CHemIDplus, IPCS |

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : Avoid release to the environment. Disposal must be done according to official regulations.

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. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Dispose of as unused product. Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1114
UN-No. (TDG) : UN1114
UN-No. (IMDG) : 1114
UN-No. (IATA) : 1114

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Benzene
Proper Shipping Name (TDG) : BENZENE
Proper Shipping Name (IMDG) : BENZENE
Proper Shipping Name (IATA) : Benzene

14.3. Transport hazard class(es)

DOT

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



TDG

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



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IMDG

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



IATA

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



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) : UN1114
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.
T4 - 2.65 178.274(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) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 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) : UN1114
Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 5 L

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Emergency Response Guide (ERG) Number : 130

IMDG

Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
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
Flash point (IMDG) : -11°C c.c.
Properties and observations (IMDG) : Colourless liquid with a characteristic odour. Flashpoint: -11°C c.c. Explosive limits: 1.4% to 8%
Freezing point 5°C, flashes below its freezing point. Immiscible with water. Narcotic. Exposure to this substance may produce serious chronic effects of a toxic nature.

MFAG-No : 130

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
ERG code (IATA) : 3H

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

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|---|---|
| Subject to reporting requirements of United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS) | |
| CERCLA RQ | 10 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 |
|---|---------|-------------|-------------------|-------|
| Benzene-D ₆ (D, 99%) reagent grade | 71-43-2 | Not present | - | |

15.2. International regulations

CANADA

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

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EU-Regulations

No additional information available

National regulations

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) |
|--|
| 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

| Benzene-D ₆ (D, 99%) reagent grade (71-43-2) | |
|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | Yes |
| U.S. - California - Proposition 65 - Developmental Toxicity | Yes |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Female | No |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | Yes |
| No significant risk level (NSRL) | 6.4 µg/day (oral); 13 µg/day (inhalation) |
| Maximum allowable dose level (MADL) | 24 µg/day (oral); 49 µg/day (inhalation) |
| 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 : 04/17/2024

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 |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H340 | May cause genetic defects |
| H350 | May cause cancer |

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.