



BENZENE-D6 "100%" (D, 99.96%)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 12/16/2010 Revision date: 5/17/2023 Supersedes: 7/20/2012 Version: 3.1

SECTION 1: Identification

1.1. Identification

Product form : Substance
Substance name : BENZENE-D6 "100%" (D, 99.96%)
Chemical name : BENZENE-D6 "100%" (D, 99.96%)
CAS-No. : 71-43-2
Product code : DLM-40
Formula : C6H6

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 (Dermal, Inhalation, oral)
Carcinogenicity Category 1A	H350	May cause cancer (Dermal, Inhalation, 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 (Dermal, Inhalation, oral)
H350 - May cause cancer (Dermal, Inhalation, oral)

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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. heat, hot surfaces, 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 Both hands 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 Hazard pictograms (CLP) 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, Dry chemical, Water spray to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container to Comply with applicable regulations.
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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-D6 "100%" (D, 99.96%) (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	: Call a physician immediately. Evacuate danger area.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Get medical advice/attention.

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First-aid measures after skin contact	: Wash immediately with lots of water (15 minutes)/shower. Remove/Take off immediately all contaminated clothing. Take immediately victim to hospital. Get medical advice/attention.
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	: Do not induce vomiting. Rinse mouth out with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

Potential Adverse human health effects and symptoms	: 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. Effects on humans. stomach. 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.
Symptoms/effects	: May cause cancer (in contact with skin, if inhaled, if swallowed). May cause genetic defects (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Harmful in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: Flash back possible over important distance. Explosion risk in case of fire.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

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.
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

6.1.1. For non-emergency personnel

Emergency procedures : Wear personal protective equipment. No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Ensure adequate air ventilation. Remove all sources of ignition. Evacuate area. 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

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal.
Methods for cleaning up : Vacuum with an equipment that avoids ignition risk. 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

Additional hazards when processed : Avoid all contact with skin, eyes, or clothing. Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). Take precautionary measures against static discharges.
Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes.
Hygiene measures : Separate working clothes from town clothes. Launder separately. 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

Technical measures : Store in a well-ventilated place. Keep container tightly closed. Keep dry. Ground/bond container and receiving equipment.
Storage conditions : Store at room temperature away from light and moisture.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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USA - ACGIH - Occupational Exposure Limits	
Local name	Benzene
ACGIH OEL TWA [ppm]	0.5 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
ACGIH OEL STEL [ppm]	2.5 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
ACGIH OEL C	0.03 mg/g Parameter: S-Phenylmercaptric acid Biological Specimen: in urine; 0.5000 mg/g Parameter: t,t-Muconic acid Biological Specimen: In Urine; Basis: ACGIH - Biological Exposure Indices (BEI) Remark: End of shift (As soon as possible after exposure ceases)
Remark (ACGIH)	Leukemia. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Confirmed human carcinogen. Danger of cutaneous absorption.
ACGIH chemical category	No component of this product present at levels greater than or equal to 0.1% is identifiable as a carcinogen or potential carcinogen by ACGIH.
Regulatory reference	ACGIH 2022
USA - ACGIH - Biological Exposure Indices	
Local name	BENZENE
BEI	0.03 mg/g Parameter: S-Phenylmercaptric acid Biological Specimen: in urine; 0.5000 mg/g Parameter: t,t-Muconic acid Biological Specimen: In Urine; Basis: ACGIH - Biological Exposure Indices (BEI) Remark: End of shift (As soon as possible after exposure ceases)
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Benzene
OSHA PEL TWA [2]	10 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2
OSHA PEL C [ppm]	25 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	50 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2
Remark (OSHA)	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift: 50 ppm Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-2. Z37-40-1969 See 1910.1028. See Table Z-2 for limits applicable in the operations or sectors excluded in 1910.1028. The final benzene standard in 1910.1028 applies to all occupational exposures to benzene except some subsegments of industry where exposures are consistently under the action level (i.e., distribution and sale of fuels, sealed containers and pipelines, coke production, oil and gas drilling and production, natural gas processing, and the percentage exclusion for liquid mixtures); for the excepted subsegments, the benzene limits in Table Z-2 apply.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA [ppm]	0.1 ppm Basis: USA. NIOSH. Recommended Exposure Limits
NIOSH REL STEL [ppm]	1 ppm Basis: USA. NIOSH. Recommended Exposure Limits
Remark (NIOSH)	Potential Occupational Carcinogen. See Appendix A.

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Protective goggles. Gloves. Self-contained breathing apparatus.

Materials for protective clothing:

Wear suitable protective clothing and gloves

Hand protection:

protective gloves

Eye protection:

Chemical goggles or face shield. Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing, gloves and eye/face protection

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Approved 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. clear.
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: 5.5 °C (41.9 °F) - lit.
Freezing point	: No data available
Boiling point	: 80 °C (176 °F) - lit
Flash point	: -11 °C (12.2 °F) - closed cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 221.3 hPa (166 mmHg) at 37.7 °C (99.9 °F); 99.5 hPa (74.6 mmHg) at 20 °C (68 °F)
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 0.95 g/ml at 25 °C (77 °F) (Labeled)
Molecular mass	: 84.15 g/mol (Labeled)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: 2.13 at 25 °C (77 °F)
Auto-ignition temperature	: 562 °C (1,043.6 °F)

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Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: 1.3 – 8 % (V)
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

Vapors may form flammable mixture with air. Highly flammable liquid and vapor.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

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

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	> 5960 mg/kg male (OECD Test Guideline 401)
LD50 dermal rabbit	8263 mg/kg
LC50 Inhalation - Rat	43.7 mg/l/4h female - 4 h (OECD Test Guideline 403)
ATE US (dermal)	8263 mg/kg body weight
ATE US (vapors)	43.7 mg/l/4h
ATE US (dust, mist)	43.7 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 (Dermal, Inhalation, oral).
Carcinogenicity	: May cause cancer (Dermal, Inhalation, oral).

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BENZENE-D6 "100%" (D, 99.96%) (71-43-2)	
NOAEL (chronic,oral,animal/male,2 years)	100 mg/kg body weight Rat - male and female - OECD Test Guideline 408
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Specifically Regulated Carcinogen list	Yes

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	: No data available
Potential Adverse human health effects and symptoms	: 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. Effects on humans. stomach. 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.
Symptoms/effects	: May cause cancer (in contact with skin, if inhaled, if swallowed). May cause genetic defects (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Harmful in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

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.
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BENZENE-D6 "100%" (D, 99.96%) (71-43-2)	
LC50 - Fish [1]	5.3 mg/l
EC50 - Crustacea [1]	17.2 mg/l Ceriodaphnia dubia (Water flea) - 48 h
EC50 - Other aquatic organisms [1]	29 mg/l Pseudokirchneriella subcapitata (green algae) - 72 h
EC50 - Crustacea [2]	100 mg/l Growth inhibition EC50 - Pseudokirchneriella subcapitata (green algae) - 72 h (OECD Test Guideline 201)
ErC50 algae	29 mg/l
NOEC chronic fish	0.8 mg/l

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12.2. Persistence and degradability

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Persistence and degradability	Aerobic - exposure time: 28 d.
Biodegradation	96 % - Readily biodegradable (OECD Test Guideline 301F)

12.3. Bioaccumulative potential

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BCF - Fish [1]	0.05 mg/l <i>Leuciscus idus</i> (Golden ofe) - 3 d
Bioconcentration factor (BCF REACH)	10
Partition coefficient n-octanol/water (Log Pow)	2.13 at 25 °C (77 °F)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 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.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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.

Additional information : Flammable vapors may accumulate in the container.

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 : UN1114

UN-No. (TDG) : Not applicable

UN-No. (IMDG) : 1114

UN-No. (IATA) : 1114

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Benzene

Proper Shipping Name (TDG) : Not applicable

Proper Shipping Name (IMDG) : BENZENE

Proper Shipping Name (IATA) : Benzene

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3

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Hazard labels (DOT) : 3



TDG

Transport hazard class(es) (TDG) : Not applicable

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) : Not applicable

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

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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

No data available

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-D6 "100%" (D, 99.96%) (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):

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15.2. International regulations

CANADA

BENZENE-D6 "100%" (D, 99.96%) (71-43-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

BENZENE-D6 "100%" (D, 99.96%) (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-D6 "100%" (D, 99.96%) (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	Yes
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 : 05/17/2023

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

BENZENE-D6 "100%" (D, 99.96%)

Safety Data Sheet

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

Full text of H-phrases	
H315	Causes skin irritation
H340	May cause genetic defects
H350	May cause cancer

NFPA health hazard

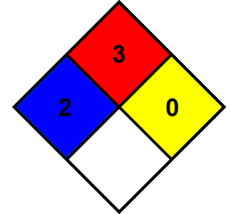
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

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
: * - Chronic (long-term) health effects may result from repeated overexposure

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.