



GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

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: 04/06/2015

Revision date: 29/06/2017

Supersedes: 04/06/2015

Version: 2.0

CLM-7924-S

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

1.1. Product identifier

Product form : Mixtures
Product name : GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE
Product code : CLM-7924-S

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

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

Emergency telephone number

Emergency numbers:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373
Asp. Tox. 1 H304

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

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

Repr.Cat.3; R62
Repr.Cat.3; R63
F; R11
Xn; R48/20
Xi; R38
N; R51/53
R67

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373
Asp. Tox. 1 H304
Aquatic Acute 2 H401

Full text of H statements : see section 16

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

Adverse physicochemical, human health and environmental effects

Bladder, Liver, Kidney, Brain. Highly flammable liquid and vapor. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Hazardous ingredients

Hazard statements (CLP)

Precautionary statements (CLP)

- : Danger
- : TOLUENE UNLABELED
- : H225 - Highly flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility. Suspected of damaging the unborn child (in contact with skin, if swallowed, if inhaled)
H373 - May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)
- : 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
P260 - Do not breathe dust, fume, gas, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

Hazard statements (GHS-US)

Precautionary statements (GHS-US)

- : Danger
- : H225 - Highly flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility or the unborn child (Dermal, Inhalation, oral)
H373 - May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (Dermal, Inhalation, oral)
H401 - Toxic to aquatic life
- : 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, open flames, sparks. - No smoking
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
P260 - Do not breathe dust, fume, gas, mist, spray, vapors
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

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
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a doctor, a POISON CENTER if you feel unwell
P314 - Get medical advice/attention if you feel unwell
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, Dry chemical, Water spray 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

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	99.9942	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%)	(CAS No) 134237-52-8 (Unlabeled)	0.0058	Repr.Cat.3; R62 Repr.Cat.3; R63 N; R50/53 R64

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	99.9942	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%)	(CAS No) 134237-52-8 (Unlabeled)	0.0058	Lact., H362 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
TOLUENE UNLABELED	(CAS No) 108-88-3	99.9942	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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 inhalation	: Remove person to fresh air and keep comfortable for breathing. 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	: 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: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Immediately call a poison center or doctor/physician. Do not induce vomiting. Call a physician immediately.

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

Symptoms/injuries	: Suspected of damaging fertility. Suspected of damaging the unborn child (Inhalation, dermal, oral). May cause damage to organs (brain, kidneys, liver, urinary bladder) (Inhalation, dermal, oral). Causes damage to organs (brain, kidneys, liver, urinary bladder) (Inhalation, dermal, oral). May cause drowsiness or dizziness.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

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

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Highly flammable liquid and vapor.

5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : 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 : Ventilate spillage area. Use personal protective equipment, and ensure adequate ventilation. Avoid breathing vapors, mist, gas. Remove ignition sources, and move personnel to safe area. Vapors accumulate especially in low areas to form explosive concentrations. No open flames, no sparks, and no smoking. Do not breathe dust, fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.

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.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.
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.

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
- Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe fume, dust, gas, mist, spray, vapors, Aerosols. Avoid contact with skin and eyes.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 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 : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
- Storage conditions : Store refrigerated (-5 C to 5 C). Protect from light.
- Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Visual impairment, Female reproductive, Pregnancy loss
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm Visual impairment, Female reproductive, Pregnancy loss
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000

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.
- 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.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
- 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 : 92.14 g/mol
- Color : Colorless.
- Odor : No data available.
- Odor threshold : No data available

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 110 - 111 °C (230 - 232 °F)
Flash point	: 4 °C (39.2 °F) - closed cup
Auto-ignition temperature	: 535 °C (995 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 29.1 hPa (21.8 mmHg) at 20.0 °C (68.0 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.865 g/ml at 25 °C (77 °F)
Solubility	: No data available
Log Pow	: No data available
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	: 1.2 - 7 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

TOLUENE UNLABELED (108-88-3)	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12500 - 28800 mg/m ³ 4 h
ATE CLP (dermal)	12196.000 mg/kg body weight
ATE CLP (vapors)	12.500 mg/l/4h
ATE CLP (dust, mist)	12.500 mg/l/4h

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

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CLM-7924-S

Safety Data Sheet

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Reproductive toxicity	: Suspected of damaging fertility. Suspected of damaging the unborn child (in contact with skin, if swallowed, if inhaled).
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure	: May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Harmful if inhaled. 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/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

TOLUENE UNLABELED (108-88-3)	
LC50 fish 1	74 - 340 mg/l <i>Lepomis macrochirus</i> (Bluegill) - 96h
LC50 other aquatic organisms 1	10 mg/l <i>Pseudokirchneriella subcapitata</i> (Green algae) - 24 h
EC50 Daphnia 1	8 mg/l <i>Daphnia magna</i> (Water flea) - 24h
LC50 fish 2	7.63 mg/l <i>Oncorhynchus mykiss</i> (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l <i>Daphnia magna</i> (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l <i>Chlorella vulgaris</i> (Fresh water algae) - 24 h
LOEC (chronic)	8.04 mg/l <i>Pimephales promelas</i> (Fathead minnow) - 7 d
NOEC (chronic)	5.44 mg/l <i>Pimephales promelas</i> (fathead minnow) - 7 d

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Disposal must be done according to official regulations.

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.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations:	: Dispose of contents/container to Comply with applicable regulations.
Additional information	: Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.
Ecology - waste materials	: Hazardous waste due to toxicity.

SECTION 14: Transport information

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

14.1. UN number

UN-No.(DOT)	: 1294
DOT NA no.	UN1294

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toluene
Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger
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

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Hazard labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular label with a black border. It is divided into two horizontal sections. The top section contains the number "33" and the bottom section contains the number "1294".

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 1l
EAC : 3YE
Excepted quantities (ADR) : E2

Transport by sea

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.
MFAG-No : 130

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
Civil Aeronautics Law : Flammable liquids

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

Safety Data Sheet

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14.4. Environmental hazards

Dangerous for the environment

:



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

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

Subject to reporting requirements of United States SARA Section 313

SARA Section 311/312 Hazard Classes

Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

TOLUENE UNLABELED (108-88-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ

1000 lb

SARA Section 302 Threshold Planning Quantity (TPQ)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA Section 311/312 Hazard Classes

Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

SARA Section 313 - Emission Reporting

Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

Listed on the Canadian DSL (Domestic Substances List)

TOLUENE UNLABELED (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE()

U.S. - California - Proposition 65 - Carcinogens List

No

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

No

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

TOLUENE UNLABELED (108-88-3)

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)

No

Yes

No

No

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

TOLUENE UNLABELED (108-88-3)

State or local regulations

U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) 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.

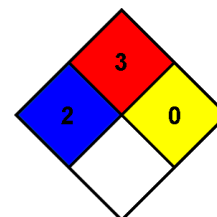
Full text of R-, H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 2	Flammable liquids Category 2
Lact.	Reproductive toxicity (Lact.)
Repr. 2	Reproductive toxicity 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
H225	Highly flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H362	May cause harm to breast-fed children
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R64	May cause harm to breastfed babies
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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.



HMIS III Rating

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

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

GAMMA-HEXABROMOCYCLODODECANE (13C12, 99%) 50 UG/ML IN TOLUENE

CLM-7924-S

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

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