

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: 31/01/2018 Revision date: : Version: 1.0

EC-5477

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

1.1. Product identifier

Product form : Mixtures

Product name : CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED

Product code : EC-5477

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

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

Emergency telephone number

Emergency numbers:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2 H225
Skin Irrit. 2 H315
STOT SE 3 H336
Asp. Tox. 1 H304
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

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

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

Xi; R38 N; R50/53 R67 F; R11 Xn; R65

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2 H225 Skin Irrit. 2 H315 STOT SE 3 H336 Asp. Tox. 1 H304 Aquatic Acute 1 H400 Aquatic Chronic 1 H410

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

Liver, Kidney. Highly flammable liquid and vapour. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Very toxic to aquatic life with long lasting effects.

2.2. **Label elements**

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

Hazard pictograms (CLP)









Signal word (CLP) : Danger

Hazardous ingredients : ISOOCTANE UNLABELED

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : 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, lighting, ventilating equipment P261 - Avoid breathing dust, fume, gas, mist, spray, vapours 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

GHS-US labelling

Hazard pictograms (GHS-US)

Precautionary statements (GHS-US)









Signal word (GHS-US) : Danger

Hazard statements (GHS-US) H225 - Highly flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H410 - Very toxic to aquatic life with long lasting effects

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 P261 - Avoid breathing dust, fume, gas, mist, spray, vapours 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

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

P312 - Call a doctor, a POISON CENTER if you feel unwell

P321 - Specific treatment (see Hazardous component(s) for labelling 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

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extinguishing powder to extinguish

P391 - Collect spillage

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

| 3.2. Mixtures | | | |
|--------------------------------|---|----------|---|
| Name | Product identifier | % | Classification according to Directive 67/548/EEC |
| ISOOCTANE UNLABELED | (CAS No) 540-84-1 (EC No) 208-759-1 (EC Index No) 601-009-00-8 (REACH-no) 01-2119457965-22 | 99.99993 | Xi; R38 N; R50/53 R67 F; R11 Xn; R65 |
| TETRACHLORO-M-XYLENE UNLABELED | (CAS No) 877-09-8 (EC No) 212-886-8 | 0.000034 | Xn; R22 Xi; R36/37/38 |
| DECACB (PCB-209) (13C12, 99%) | (CAS No) 105600-27-9 (EC No) 218-115-1 (Unlabeled) (EC Index No) 602-039-00-4 (Unlabeled) | 0.000034 | Carc.Cat.1; R45 Carc.Cat.1; R49 Repr.Cat.1; R60 Repr.Cat.1; R61 Xn; R20/21/22 Xi; R38 N; R50/53 |
| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| ISOOCTANE UNLABELED | (CAS No) 540-84-1 | 99.99993 | Flam. Liq. 2, H225 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------------------------|---|----------|---|
| ISOOCTANE UNLABELED | (CAS No) 540-84-1 (EC No) 208-759-1 (EC Index No) 601-009-00-8 (REACH-no) 01-2119457965-22 | 99.99993 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| TETRACHLORO-M-XYLENE UNLABELED | (CAS No) 877-09-8 (EC No) 212-886-8 | 0.000034 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 |
| DECACB (PCB-209) (13C12, 99%) | (CAS No) 105600-27-9 (EC No) 218-115-1 (Unlabeled) (EC Index No) 602-039-00-4 (Unlabeled) | 0.000034 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Carc. 1A, H350 Repr. 1A, H360 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

| Name | Product identifier | % | GHS-US classification |
|--------------------------------|--------------------|----------|---|
| ISOOCTANE UNLABELED | (CAS No) 540-84-1 | 99.99993 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| TETRACHLORO-M-XYLENE UNLABELED | (CAS No) 877-09-8 | 0.000034 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 |

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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

| Name | Product identifier | % | GHS-US classification |
|-------------------------------|----------------------|----------|---|
| DECACB (PCB-209) (13C12, 99%) | (CAS No) 105600-27-9 | 0.000034 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Carc. 1A, H350 Repr. 1A, H360 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |

Full text of R- and H-statements; see section 16

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general

: If medical advice is needed, have product container or label at hand. Call a physician immediately. Evacuate danger area.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial

respiration. Call a doctor.

First-aid measures after skin contact Rinse skin with water/shower. Take immediately victim to hospital. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. First-aid measures after ingestion

Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause drowsiness or dizziness.

Symptoms/injuries after inhalation : May be fatal if swallowed and enters airways. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact Causes skin irritation. Symptoms/injuries after eye contact May cause eye irritation.

Symptoms/injuries after ingestion May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing

chemical pneumonia. Risk of lung oedema.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

Extinguishing media

: Flood fire area with water from a distance. Water spray. Dry powder. Foam. Carbon dioxide. Suitable extinguishing media

Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Explosion hazard : Flash back possible over important distance.

: Vapours may form flammable mixture with air. Highly flammable liquid and vapour. Reactivity

5.3. **Advice for firefighters**

Firefighting instructions : Wear a self contained breathing apparatus.

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

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

Personal precautions, protective equipment and emergency procedures 6.1.

6.1.1. For non-emergency personnel

Emergency procedures

Ventilate spillage area. Use personal protective equipment as required. Remove all sources of ignition. Ensure adequate air ventilation. Provide adequate ventilation to minimize dust and/or vapour concentrations. No open flames, no sparks, and no smoking. Avoid breathing gas, mist, vapours. Avoid contact with skin and eyes. Evacuate danger area. Special attention should be given to low areas/pits where flammable vapours 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".

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For containment

Other information

Methods for cleaning up

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

6.2. Environmental precautions

Stop leak without risks if possible. Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

6.3. Methods and material for containment and cleaning up

: Vacuum with an equipment that avoids ignition risk. This material and its container must be disposed of in a safe way, and as per local legislation. Collect spillage.

Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters. This material and its container must be disposed of in a safe way, and as per local

: 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.

Precautions for safe handling

: 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 vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapours, mist. Avoid contact with skin and

eves.

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

 Keep dry. Store in tightly closed, leak-proof containers. Containers which are opened should be properly resealed and kept upright to prevent leakage. Ground/bond container and receiving equipment.

Storage conditions

: Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED | | |
|--|-------------------------|--|
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 300.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) |
| Italy - Portugal - USA ACGIH | Remark (ACGIH) | Upper Respiratory Tract irritation |
| DECACB (PCB-209) (13C12, | 99%) (105600-27-9) | |
| USA NIOSH | NIOSH REL (TWA) (mg/m³) | 0.001 mg/m³ USA. NIOSH Recommended Exposure Limits. Remarks : Potential Occupational Carcinogen. |
| ISOOCTANE UNLABELED (5 | 40-84-1) | |
| Italy - Portugal - USA ACGIH | ACGIH TWA (ppm) | 300.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV) |
| Italy - Portugal - USA ACGIH | Remark (ACGIH) | Upper Respiratory Tract irritation |

8.2. Exposure controls

Appropriate engineering controls

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Ensure good ventilation of the work station.

Personal protective equipment

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



Materials for protective clothing

Hand protection

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses. 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.

: Wear suitable protective clothing and gloves.

Wear suitable protective clothing and gloves.

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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 : 114.23 g/mol Colour : Colourless. Odour : No data available Odour threshold No data available рΗ : No data available Relative evaporation rate (butylacetate=1) : No data available

Melting point : -107 °C (-161 °F)
Freezing point : No data available

Boiling point : 98 - 99 °C (208 - 210 °F) at 1,013 hPa (760 mmHg)

Flash point : -12 °C (10 °F) - closed cup

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Not applicable

Vapour pressure : 55 hPa (41 mmHg) at 21 °C (70 °F); 117 hPa (88 mmHg) at 37.8 °C (100.04 °F)

Relative vapour density at 20 °C $\,$: 3.94 - (Air = 1.0) Relative density $\,$: No data available

Density : 0.69 g/ml at $20 \,^{\circ}\text{C}$ ($68 \,^{\circ}\text{F}$)

Solubility : Water: insoluble

Log Pow : 4.6

Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : 1 - 6 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours may form flammable mixture with air. Highly flammable liquid and vapour.

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4. Conditions to avoid

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

| CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED | |
|--|--|
| LD50 oral rat | > 5000 mg/kg (OECD Test Guideline 401) |

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| CHLORINATED INTERNAL STANDARD STO | OCK SOLUTION 1 UNLABELED | |
|---|--|--|
| LD50 dermal rabbit | > 2000 mg/kg (OECD Test Guideline 402) | |
| LC50 inhalation rat (mg/l) | > 33.52 mg/l/4h (OECD Test Guideline 403) | |
| TETRACHLORO-M-XYLENE UNLABELED (877-09-8) | | |
| ATE CLP (oral) | 500.000 mg/kg bodyweight | |
| DECACB (PCB-209) (13C12, 99%) (105600-2 | 27-9) | |
| ATE CLP (oral) | 500.000 mg/kg bodyweight | |
| ATE CLP (dermal) | 1100.000 mg/kg bodyweight | |
| ATE CLP (gases) | 4500.000 ppmv/4h | |
| ATE CLP (vapours) | 11.000 mg/l/4h | |
| ATE CLP (dust,mist) | 1.500 mg/l/4h | |
| ISOOCTANE UNLABELED (540-84-1) | | |
| LD50 oral rat | > 5000 mg/kg (OECD Test Guideline 401) | |
| LD50 dermal rabbit | > 2000 mg/kg (OECD Test Guideline 402) | |
| LC50 inhalation rat (mg/l) | > 33.52 mg/l/4h (OECD Test Guideline 403) | |
| Skin corrosion/irritation | : Skin. rabbit. Result: Irritating to skin. (OECD 404 method) | |
| Serious eye damage/irritation | : Eyes. rabbit. Result: No eye irritation. (OECD 405 method) | |
| Respiratory or skin sensitisation | : Not classified | |
| Germ cell mutagenicity | : rat - Unscheduled DNA synthesis | |
| Carcinogenicity | : Not classified | |
| Reproductive toxicity | : Not available | |
| STOT-single exposure | : May cause drowsiness or dizziness | |
| STOT-repeated exposure | : Health hazard - Aspiration hazard | |
| | No data available | |
| Aspiration hazard | : Aspiration hazard | |
| 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. Affects the liver. | |
| Symptoms/injuries after inhalation | : May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. | |
| Symptoms/injuries after skin contact | : Causes skin irritation. | |
| Symptoms/injuries after eye contact | : May cause eye irritation. | |
| Symptoms/injuries after ingestion | : May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. Risk of lung oedema. | |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - soil

No additional information available

12.2. Persistence and degradability

| TETRACHLORO-M-XYLENE UNLABELED (877-09-8) | | |
|--|---|--|
| Persistence and degradability | Not available. | |
| DECACB (PCB-209) (13C12, 99%) (105600-27-9) | | |
| Persistence and degradability | May cause long-term adverse effects in the environment. | |
| 12.3. Bioaccumulative potential | | |
| CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED | | |
| Log Pow 4.6 | 4.6 | |
| TETRACHLORO-M-XYLENE UNLABELED (877 | 7-09-8) | |
| Bioaccumulative potential | Not available. | |
| ISOOCTANE UNLABELED (540-84-1) | | |
| Log Pow | 4.6 | |
| 12.4. Mobility in soil | | |
| TETRACHLORO-M-XYLENE UNLABELED (877-09-8) | | |

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Not available.

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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.

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 ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 1262 DOT NA no. UN1262

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Octanes

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

DOT RQ : 1000 lbs

Marine pollutant : No



14.3. Additional information

Emergency Response Guide (ERG) Number : 128

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

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: 3 - Flammable liquids Danger labels (ADR)



Orange plates

Tunnel restriction code (ADR) : D/E Limited quantities (ADR) 11 : 3YE EAC code Excepted quantities (ADR) : E2

Transport by sea

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a **DOT Vessel Stowage Location**

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

Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids

Environmental hazards

Dangerous for the environment



Other information : No supplementary information available.

14.5. Special precautions for user

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code 14.6.

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

| CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED | |
|--|---|
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporing requirements of the United States SARA Section 302. |
| SARA Section 311/312 Hazard Classes | Fire hazard Delayed (chronic) health hazard |
| SARA Section 313 - Emission Reporting | Not subject to reporing requirements of the United States SARA Section 313. |
| TETRACHLORO-M-XYLENE UNLABELED (877-09-8) | |

| TETRICOTECTION XTEETINE CITE (CT | 00 0, |
|-------------------------------------|--------|
| SARA Section 302 Threshold Planning | SARA 3 |

| 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 | Immediate (acute) health hazard |
| SARA Section 313 - Emission Reporting | Not subject to reporting requirements of the United States SARA Section 313 |

| DECACB (PCB-209) (13C12, 99%) (105600-27-9) | |
|--|--|
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporting requirements of the United States SARA Section 302. |
| SARA Section 313 - Emission Reporting | Not subject to reporting requirements of the United States SARA Section 313. |

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| ISOOCTANE UNLABELED (540-84-1) | |
|--|---|
| SARA Section 302 Threshold Planning Quantity (TPQ) | Not subject to reporing requirements of the United States SARA Section 302. |
| SARA Section 311/312 Hazard Classes | Fire hazard Delayed (chronic) health hazard |
| SARA Section 313 - Emission Reporting | Not subject to reporing requirements of the United States SARA Section 313. |

15.2. International regulations

CANADA

CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

| CHLORINATED INTERNAL STANDARD STOCK SOLUTION 1 UNLABELED() | | |
|--|--|--|
| U.S California - Proposition 65 - Carcinogens List | No | |
| U.S California - Proposition 65 - Developmental Toxicity | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No | |
| U.S California - Proposition 65 - Reproductive Toxicity - Male | No | |
| State or local regulations | U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List | |

| TETRACHLORO-M-XYLEN | E UNLABELED (877-09-8) | | | |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|----------------------------------|
| U.S California - Proposition 65 - | No significant risk level (NSRL) |
| Carcinogens List | Developmental Toxicity | Reproductive Toxicity - Female | Reproductive Toxicity - Male | |
| No | No | No | No | |

| DECACB (PCB-209) (13C12, 99%) (105600-27-9) | | | | |
|--|--|---|---|----------------------------------|
| U.S California - Proposition 65 - Carcinogens List | U.S California - Proposition 65 - Developmental Toxicity | U.S California - Proposition 65 - Reproductive Toxicity - Female | U.S California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) |
| Yes | Yes | No | No | |

| ISOOCTANE UNLABELED (540-84-1) | | | | |
|--|--|---|---|----------------------------------|
| 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 | No | No | No | |

TETRACHLORO-M-XYLENE UNLABELED (877-09-8)

State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

DECACB (PCB-209) (13C12, 99%) (105600-27-9)

State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

ISOOCTANE UNLABELED (540-84-1)

State or local regulations

- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List

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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

ISOOCTANE UNLABELED (540-84-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-. H- and EUH-statements:

| text of R-, H- and EUH-statements: | | | |
|------------------------------------|---|--|--|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 | | |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 | | |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 | | |
| 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 | | |
| Carc. 1A | Carcinogenicity, Category 1A | | |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | | |
| Flam. Liq. 2 | Flammable liquids, Category 2 | | |
| Repr. 1A | Reproductive toxicity, Category 1A | | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | | |
| STOT SE 2 | Specific target organ toxicity — Single exposure, Category 2 | | |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis | | |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | | |
| H225 | Highly flammable liquid and vapour | | |
| H302 | Harmful if swallowed | | |
| H304 | May be fatal if swallowed and enters airways | | |
| H312 | Harmful in contact with skin | | |
| H315 | Causes skin irritation | | |
| H319 | Causes serious eye irritation | | |
| H332 | Harmful if inhaled | | |
| H335 | May cause respiratory irritation | | |
| H336 | May cause drowsiness or dizziness | | |
| H350 | May cause cancer | | |
| H360 | May damage fertility or the unborn child | | |
| H371 | May cause damage to organs | | |
| H400 | Very toxic to aquatic life | | |
| H410 | Very toxic to aquatic life with long lasting effects | | |
| R11 | Highly flammable | | |
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed | | |
| R22 | Harmful if swallowed | | |
| R36/37/38 | Irritating to eyes, respiratory system and skin | | |
| R38 | Irritating to skin | | |
| R45 | May cause cancer | | |
| R49 | May cause cancer by inhalation | | |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment | | |
| R60 | May impair fertility | | |
| R61 | May cause harm to the unborn child | | |
| R65 | Harmful: may cause lung damage if swallowed | | |
| R67 | Vapours 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.

2 0

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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

HMIS III Rating

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

Flammability : 3 Serious Hazard Physical : 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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