

## 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: 26/04/2017 Revision date: : Version: 1.0

PCBB-5298

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

## 1.1. Product identifier

Product form : Mixtures

Product name : 4'-BROMO-2,3,3',4,5-PENTACB UNLABELED 100 UG/ML IN ISOOCTANE

Product code : PCBB-5298

#### 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 <a href="mailto:cilsales@isotope.com">cilsales@isotope.com</a> 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 Lig 2 H225

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

## Adverse physicochemical, human health and environmental effects

Liver, Kidney.

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#### 2.2. Label elements

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

Hazard pictograms (CLP)









Signal word (CLP) : Danger

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 ventilating, lighting, electrical equipment P261 - Avoid breathing vapours, spray, mist, gas, fume, dust 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)









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

Precautionary statements (GHS-US) : P210 - Keep away from sparks, open flames, hot surfaces, heat. - 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 mist, spray, vapours, gas, fume, dust 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 protective gloves, protective clothing, eye protection, face protection

P301+P310 - If swallowed: Immediately call a doctor 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 if you feel unwell

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 (CO2), dry

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

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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
ISOOCTANE UNLABELED	(CAS No) 540-84-1 (EC No) 208-759-1 (EC Index No) 601-009-00-8 (REACH-no) 01-2119457965-22	99.986	Xi; R38 N; R50/53 R67 F; R11 Xn; R65
4'-BROMO-2,3,3',4,5-PENTACB UNLABELED		0.014	Xn; R48/20 N; R50/53

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	99.986	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4'-BROMO-2,3,3',4,5-PENTACB UNLABELED		0.014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
ISOOCTANE UNLABELED	(CAS No) 540-84-1	99.986	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
4'-BROMO-2,3,3',4,5-PENTACB UNLABELED		0.014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

## **SECTION 4: First aid measures**

First-aid measures after eye contact

4.1.	Descri	ntion c	of first	aid	measures
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First-aid measures general : If you feel unwell, seek medical advice.

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

respiration.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.: Rinse eyes with water as a precaution.

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

physician immediately.

## 4.2. 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.

Symptoms/injuries after skin contact : Causes skin irritation. May be harmful in contact with skin.

Symptoms/injuries after eye contact : May cause severe irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Risk of lung oedema.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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## **SECTION 5: Fire-fighting measures**

#### **Extinguishing media**

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

#### Special hazards arising from the substance or mixture 5.2.

Fire hazard : Extremely flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

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

#### 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.

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

**Emergency procedures** : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapours,

mist, gas. Avoid contact with skin and eyes. 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.

#### For emergency responders 6.1.2.

Protective equipment Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

#### **Environmental precautions**

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

## Methods and material for containment and cleaning up

For containment : Collect spillage. 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.

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

waters.

## Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

## 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 dust, fume, gas, mist, spray, vapours.

Avoid contact with skin and eyes.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before Hygiene measures 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.

### Conditions for safe storage, including any incompatibilities

Ground/bond container and receiving equipment. Keep dry. Store in tightly closed, leak-proof Technical measures

containers. Containers which are opened should be properly resealed and kept upright to

prevent leakage.

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

: Heat sources. Incompatible materials

## Specific end use(s)

No additional information available

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## **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters		
4'-BROMO-2,3,3',4,5-PENTAC	CB UNLABELED 100 UG/ML IN ISOOCTANE	
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
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 goggles. Protective clothing. 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. Safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

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

Environmental exposure controls : Avoid release to the environment.

## **SECTION 9: Physical and chemical properties**

## 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 : No data available Odour threshold : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : -107 °C (-161 °F) Freezing point : No data available

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

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

: No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : Not applicable

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

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

Density : 0.69 g/ml at 20 °C (68 °F)

: Water: insoluble Solubility

Log Pow

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

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#### 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

Sparks. Heat. Direct sunlight. Overheating. Open flame.

#### 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

4'-BROMO-2,3,3',4,5-PENTACB UNLABELEI	D 100 UG/ML IN ISOOCTANE
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)
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.

Symptoms/injuries after skin contact : Causes skin irritation. May be harmful in contact with skin.

Symptoms/injuries after eye contact : May cause severe irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Risk of lung oedema.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED	100 UG/ML IN ISOOCTANE
Persistence and degradability	May cause long-term adverse effects in the environment.

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#### 12.3. **Bioaccumulative potential**

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED 100 UG/ML IN ISOOCTANE	
Log Pow	4.6
ISOOCTANE UNLABELED (540-84-1)	
Log Pow	4.6

#### **Mobility in soil** 12.4.

No additional information available

#### Results of PBT and vPvB assessment

No additional information available

#### 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**

#### 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

**UN** number

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

### **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

## **Additional information**

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

**Overland transport** 

Packing group (ADR) : 11

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 33

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Classification code (ADR) : F1

Danger labels (ADR) : 3 - Flammable liquids



Orange plates :

33 1262

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 11
EAC code : 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 : 128

#### 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

## 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

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED	100 UG/ML IN ISOOCTANE
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.

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.

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302

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4'-BROMO-2,3,3',4,5-PENTACB UNLABELED	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313

#### 15.2. International regulations

#### **CANADA**

## 4'-BROMO-2,3,3',4,5-PENTACB UNLABELED 100 UG/ML IN ISOOCTANE

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED 100 UG/ML IN ISOOCTANE()		
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	

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	

4'-BROMO-2,3,3',4,5-PENTACB UNLABELED				
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	Yes	Yes	

### **ISOOCTANE UNLABELED (540-84-1)**

## 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

## 4'-BROMO-2,3,3',4,5-PENTACB UNLABELED

#### State or local regulations

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

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

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Flam. Liq. 2	Flammable liquids, 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, Narcosis
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
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
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

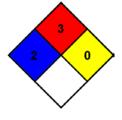
temporary incapacitation or residual injury.

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.



## **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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