

# 2,4,5-TRICHLOROPHENOL UNLABELED 100 UG/ML IN ISOOCTANE

## Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 /

Rules and Regulations

Date of issue: 17/11/2016 Revision date: : Version: 1.0

ULM-7525-SI

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

## 1.1. Product identifier

Product form : Mixture

Product name : 2,4,5-TRICHLOROPHENOL UNLABELED 100 UG/ML IN ISOOCTANE

Product code : ULM-7525-SI

#### 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

## **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 H-statements: see section 16

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

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

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

## Adverse physicochemical, human health and environmental effects

No additional information available

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

P264 - Wash hands 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

H400 - Very toxic to aquatic life

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 Both hands 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 POISON CENTER or doctor/physician

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor/physician 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 - Take off contaminated clothing and wash before reuse

P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide., Dry chemical, Water

spray for extinction 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

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P501 - Dispose of contents/container to Comply with applicable regulations

#### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

#### **Substance**

Not applicable

3.2. Mixture			
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	99.986	Xi; R38 N; R50/53 R67 F; R11
2,4,5-TRICHLOROPHENOL UNLABELED	(CAS No) 95-95-4 (EC no) 202-467-8 (EC index no) 604-017-00-X	0.014	Xi; R36 N; R50/53 Xi; R38 Xn; R22
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	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
2,4,5-TRICHLOROPHENOL UNLABELED	(CAS No) 95-95-4 (EC no) 202-467-8 (EC index no) 604-017-00-X	0.014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 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. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 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**

: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of First-aid measures general

dangerous area.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a First-aid measures after inhalation

POISON CENTER or doctor/physician if you feel unwell.

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

with plenty of soap and water. Wash contaminated clothing before reuse. Get medical

advice/attention.

First-aid measures after eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

First-aid measures after ingestion : Immediately call a POISON CENTER or doctor/physician.

## Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

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

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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

No additional information available

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## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

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

Fire hazard : Highly flammable liquid and vapour.

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

Reactivity : Vapours may form explosive mixture with air.

#### 5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

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

## **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

No additional information available

#### 6.1.2. For emergency responders

Protective equipment : Avoid breathing Avoid breathing dust, mist or spray.

#### 6.2. Environmental precautions

Avoid release to the environment. Do not let product enter drains.

## 6.3. Methods and material for containment and cleaning up

For containment : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-

brushing and place in container for disposal according to local regulations. Do not flush with

water. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

No additional information available

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

## 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Avoid breathing Avoid breathing dust,

mist or spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash Both hands thoroughly after handling.

## 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed in a dry and well-ventilated place.

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

Incompatible materials : Heat sources.

## 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested

and approved under appropriate government standards such as NIOSH or EN 166.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. Wear respiratory protection.

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## **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 : No data available рΗ Relative evaporation rate (butylacetate=1) : No data available : -107 °C (- 161 °F)

Melting point : -107 °C (- 161 °F) Freezing point : No data available Boiling point : 99 °C (210 °F)

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

Auto-ignition temperature : 396 °C (745 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapour Vapour pressure : 55 hPa (41 mmHg) at 21 °C (70 °F)

Relative vapour density at 20 °C : 3.94 - (Air = 1.0) : No data available Relative density Density : 0.692 g/ml Solubility Water: 0 % : No data available Log Pow Log Kow : No data available Viscosity, kinematic : No data available Viscosity, dynamic No data available : No data available Explosive properties 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 explosive mixture with air.

## 10.2. Chemical stability

See storage and expiration date on CoA.

## 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Direct sunlight.

## 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

May release flammable gases.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
LD50 oral rat	820 mg/kg
ATE CLP (oral)	820.000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

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Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated

Symptoms/injuries after inhalation

exposure)

: Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Potential adverse human health effects and

: To the best of our knowledge, the chemical, physical, and toxicological properties have not been the roughly investigated

symptoms thoroughly investigated.

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.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

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

2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
LC50 fish 1	0.274 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	0.9 mg/l Immobilization Daphnia magna (Water flea) - 48 h
NOEC (acute)	1 mg/l NOEC - Cyprinodon variegatus (sheepshead minnow) - 96.0 h

: May cause drowsiness or dizziness.

## 12.2. Persistence and degradability

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

## 2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4) Persistence and degradability No data available.

## 12.3. Bioaccumulative potential

2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
BCF fish 1	0.0048 mg/l Pimephales promelas (fathead minnow) - 28 d
Bioconcentration factor (BCF REACH)	1900

## 12.4. Mobility in soil

2,4,5-TRICHLOROPHENOL UNLABELED (95-95-4)	
Ecology - soil	No data available.

### 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

## 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 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 : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Dispose of as unused product.

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## **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

Transport hazard class(es) (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.

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 Marine pollutant · No



## **Additional information**

Other information : No supplementary information available.

## **Overland transport**

Packing group (ADR) : 11

Class (ADR) : 3 - Flammable liquids

Hazard identification number (Kemler No.) : 33 Classification code (ADR) : F1

Danger labels (ADR) : 3 - Flammable liquids



Orange plates

1262

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

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#### 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)

### 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

2,4,5-TRICHLOROPHENOL UNLABELED 100 UG/ML IN ISOOCTANE	
SARA Section 311/312 Hazard Classes	Fire hazard
	Immediate (acute) health hazard
	Delayed (chronic) health hazard

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

SARA Section 311/312 Hazard Classes	Fire hazard
	Immediate (acute) health hazard
	Delayed (chronic) health hazard

## 15.2. International regulations

## **CANADA**

### 2,4,5-TRICHLOROPHENOL 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

2,4,5-TRICHLOROPHENOL UNLABELED 100 UG/ML IN ISOOCTANE()	
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	
	This product does not contain any chemicals known to State of California to cause cancer,
	birth defects, or any other reproductive harm.

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

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

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## **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:

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R22	Harmful if swallowed
R36	Irritating to eyes
R38	Irritating to skin
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 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all

ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



## **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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