

# 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: 19/01/2017 Revision date: : Version: 1.0

CLM-6151-S

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

1.1. Product identifier

Product form : Mixture

Product name : 2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE

Product code : CLM-6151-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 <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 Repr. 2 H361 STOT SE 3 H336 STOT RE 2 H373 Asp. Tox. 1 H304

Full text of H-statements: see section 16

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

Carc.Cat.3; R40 Repr.Cat.3; R62 Repr.Cat.3; R63 F; R11

Xn; R20 Xn; R65 Xi; R36/38

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

24/01/2017 EN (English) 1/10

# 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

#### Adverse physicochemical, human health and environmental effects

Bladder, Liver, Kidney, Brain.

#### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS02





Signal word (CLP) : Danger

Hazardous ingredients : TOLUENE 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

H361 - Suspected of damaging fertility. Suspected of damaging the unborn child (in contact with

skin, if inhaled, if swallowed)

H373 - May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or

repeated exposure (in contact with skin, if inhaled, if swallowed)

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

P260 - Do not breathe dust, fume, gas, mist, spray, vapours 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** 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

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

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, ventilating, lighting equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge P260 - Do not breathe dust, fume, mist, spray, gas, vapours P261 - Avoid breathing dust, fume, gas, spray, mist, 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 face protection, eye 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): Řemove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

24/01/2017 EN (English) 2/10

# 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

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

P308+P313 - IF exposed or concerned: Get medical advice/attention

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P314 - Get medical advice and attention 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

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 Comply with applicable regulations

## 2.3. Other hazards

No additional information available

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

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	99.988	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
2,4,5-TRIBROMOPHENOL (13C6, 99%)	(CAS No) 14401-61-7 (Unlabeled) (EC no) 204-278-6 (Unlabeled)	0.012	Xn; R20/22 Xi; R36/37/38
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	99.988	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
2,4,5-TRIBROMOPHENOL (13C6, 99%)	(CAS No) 14401-61-7 (Unlabeled) (EC no) 204-278-6 (Unlabeled)	0.012	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Name	Product identifier	%	GHS-US classification
TOLUENE UNLABELED	(CAS No) 108-88-3	99.988	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 R- and H-statements: see section 16

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

### 4.1. Description of first aid measures

First-aid measures general

- : IF exposed or concerned: Get medical advice/attention.
- First-aid measures after inhalation : 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.

Aquatic Acute 2, H401

24/01/2017 EN (English) 3/10

## 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

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:

Wash with plenty of soap and water. Get medical advice/attention. Specific treatment (see

Hazard pictograms (CLP) on this label). Gently wash with plenty of soap and water.

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.

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

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness

and dizziness.

Symptoms/injuries after skin contact : May be harmful if absorbed through the skin. Causes skin irritation.

Symptoms/injuries after eye contact : Contact may cause eye irritation.

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

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

No additional information available

## 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 : Vapors may form explosive mixture with air.

#### 5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool unopened containers.

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

Emergency procedures : 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.

## 6.1.2. For emergency responders

Protective equipment : Avoid breathing dust, mist or spray.

# 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 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.

## 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. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray. Obtain special instructions before use. Do

not handle until all safety precautions have been read and understood.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# 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 at room temperature away from light and moisture.

Incompatible materials : Heat sources.

24/01/2017 EN (English) 4/10

# 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

#### 7.3. Specific end use(s)

No additional information available

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

## 8.1. Control parameters

2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.000000000 ppm Visual impairment, Female reproductive, Pregnancy loss
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.0000000000 ppm Visual impairment, Female reproductive, Pregnancy loss
USA OSHA	OSHA PEL (TWA) (ppm)	100.0000000000 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150.0000000000 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000

## 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 : Wear safety glasses with side shields (or goggles) and a face shield.

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.

Other information : Do not eat, drink or smoke when using this product.

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

## 9.1. Information on basic physical and chemical properties

: Liquid Physical state : Liquid. Appearance Molecular mass : 92.14 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 : -93 °C (-135 °F) Melting point : No data available Freezing point

Boiling point : 110 - 111 °C (230 - 232 °F)
Flash point : 4.0 °C (39.2 °F) - closed cup

Auto-ignition temperature : 535 °C (995 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : 29.1 hPa (21.8 mmHg) at 20.0 °C (68.0 °F)

Relative vapour density at 20 °C : No data available Relative density : No data available

Density : 0.865 g/ml at  $25 \,^{\circ}\text{C}$  (77  $^{\circ}\text{F}$ )

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
Oxidising properties : No data available

24/01/2017 EN (English) 5/10

# 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

Explosive limits : 1.2 - 7 % (V)

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapors 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

Avoid Heat, Flames and Sparks. Extremes of temperature and direct sunlight.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Formed under fire conditions. - Carbon oxides.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12500 - 28800 mg/m³ 4 h
ATE CLP (dermal)	12196.000 mg/kg bodyweight
ATE CLP (vapours)	12.500 mg/l/4h
ATE CLP (dust,mist)	12.500 mg/l/4h

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/m³ 4 h
ATE CLP (dermal)	12196.000 mg/kg bodyweight
ATE CLP (vapours)	12.500 mg/l/4h
ATE CLP (dust,mist)	12.500 mg/l/4h

2,4,5-TRIBROMOPHENOL (13C6, 99%) (14401-61-7 (Unlabeled))	
ATE CLP (oral)	500.000 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

Skin corrosion/irritation : Causes skin irritation.

Skin - rabbit - Skin irritation - 24 h

Serious eye damage/irritation : Not classified

No data available

Respiratory or skin sensitisation : Not available

No data available

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Experiments have shown reproductive toxicity effects in male and female laboratory animals.

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

No data available

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).

No data available

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

24/01/2017 EN (English) 6/10

# 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

Potential adverse human health effects and

symptoms

Lung irritation, chest pain, pulmonay edema, Inhalation sudies have shown the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotom in animals. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly

IARC group : 3

Symptoms/injuries after inhalation

: May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness

and dizziness.

Symptoms/injuries after skin contact

: May be harmful if absorbed through the skin. Causes skin irritation.

Symptoms/injuries after eye contact

: Contact may cause eye irritation.

Symptoms/injuries after ingestion

: May be fatal if swallowed and enters airways.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE		
LC50 fish 1	74 - 340 mg/l Lepomis macrochirus (Bluegill) - 96h	
LC50 other aquatic organisms 1	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h	
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h	
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h	
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h	
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h	
LOEC (chronic)	8.04 mg/l Pimephales promelas (Fathead minnow) - 7 d	
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d	

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

## 12.2. Persistence and degradability

2,4,5-TRIBROMOPHENOL (13C6, 99%) (14401-61-7 (Unlabeled))	
Persistence and degradability	Not available.

## 12.3. Bioaccumulative potential

2,4,5-TRIBROMOPHENOL (13C6, 99%) (14401-61-7 (Unlabeled))	
Bioaccumulative potential	Not available.

## 12.4. Mobility in soil

2,4,5-TRIBROMOPHENOL (13C6, 99%) (14401-61-7 (Unlabeled))	
Ecology - soil	Not available.

# 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

## **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.

24/01/2017 EN (English) 7/10

# 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

## **SECTION 14: Transport information**

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

14.1. UN number

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

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toluene

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.

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 liquids

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

Danger labels (ADR) : 3 - Flammable liquids



Orange plates

33 1294

Tunnel restriction code : 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 : 130

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

24/01/2017 EN (English) 8/10

# 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

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement

Regulations)

## 14.4. Environmental hazards

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-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of United States SARA Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

TOLUENE UNLABELED (108-88-3)	
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

## 15.2. International regulations

### **CANADA**

## 2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 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

2,4,5-TRIBROMOPHENOL (13C6, 99%) 100 UG/ML IN TOLUENE()	
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
	WARNING! This product contains a chemical known by the state of California to cause
	birth defects or other reproductive harm.

## **TOLUENE UNLABELED (108-88-3)**

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

WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.

24/01/2017 EN (English) 9/10

# 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

## **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 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
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, 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
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
R11	Highly flammable
R20	Harmful by inhalation
R20/22	Harmful by inhalation and if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
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
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 Multi-Solvent 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

24/01/2017 EN (English) 10/10