



Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 05.05.2020

Version number 1

Revision: 05.05.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

· **Product name:** Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

· **Part number:** MT-ME-51338013

· **CAS Number:**
95-73-8

· **EC number:**
202-445-8

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** Reference material for laboratory use only

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**
LGC GmbH
Louis-Pasteur-Straße 30
14943 Luckenwalde
GERMANY

Tel: +49(0) 3371 689 5097
Fax: +49(0) 3371 689 5099
Email: info@lgc-germany.com
Web : www.lgcstandards.com

Further information obtainable from:

Product safety department
eMail : sds-request@lgcgroup.com

1.4 Emergency telephone number:

For Hazardous Materials or Dangerous Goods Incident
Spill, Leak, Fire Exposure, or Accident
Call CHEMTREC:
USA & Canada 1-800-424-9300
Rest of the world +1 703-741-5970

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

CHEN



Safety data sheet

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Version number 1

Revision: 05.05.2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. from page 1)

· Hazard pictograms



GHS07 GHS09

· Signal word Warning

· Hazard statements

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances

· CAS No. Description

95-73-8 2,4-Dichlorotoluene

· Identification number(s) None

· EC number: 202-445-8

· RTECS: XT0730000

· Additional information:

For the wording of the listed hazard phrases refer to section 16.

Registration, Evaluation, Authorization and Restriction of Chemicals EC1907/2006. A REACH registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)

—CHEN—



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Revision: 05.05.2020

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(Contd. from page 2)

- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Rinse mouth. Do not induce vomiting.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
Store only in the original receptacle unless other advice is given on the CoA.
Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.

(Contd. on page 4)

—CHEN—



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Version number 1

Revision: 05.05.2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. from page 3)

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **Additional information:** Lists used were valid at the time of SDS preparation.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not required.

Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374



Protective gloves

· **Material of gloves** Fluorocarbon rubber (Viton)

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

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(Contd. on page 5)



Safety data sheet
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**Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C,
20°C, 25°C**

(Contd. from page 4)

SECTION 9: Physical and chemical properties**· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Liquid**Colour:** Colourless**· Odour:** Aromatic**· Odour threshold:** Not determined.**· pH-value:** Not determined.**· Change in condition****Melting point/freezing point:** -13 °C**Initial boiling point and boiling range:** 200 °C**· Flash point:** 79 °C**· Flammability (solid, gas):** Not determined.**· Ignition temperature:** >450 °C**· Decomposition temperature:** Not determined.**· Auto-ignition temperature:** Not determined.**· Explosive properties:** Not determined.**· Explosion limits:****Lower:** 1.9 Vol %**Upper:** 4.5 Vol %**· Vapour pressure at 50 °C:** 4 hPa**· Density at 20 °C:** 1.25 g/cm³**· Relative density** Not determined.**· Vapour density** Not determined.**· Evaporation rate** Not determined.**· Solubility in / Miscibility with
water at 20 °C:**

0.008 g/l

· Partition coefficient: n-octanol/water: 4.24 Log Pow**· Viscosity:****Dynamic:** Not determined.**Kinematic:** Not determined.**· 9.2 Other information**

No further relevant information available.

CHEN

(Contd. on page 6)



Safety data sheet

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Version number 1

Revision: 05.05.2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. from page 5)

SECTION 10: Stability and reactivity

· 10.1 Reactivity

Stable under normal conditions.

No further relevant information available.

· 10.2 Chemical stability Stable under normal conditions.

· Thermal decomposition / conditions to be avoided:

Formation of toxic gases is possible during heating or in case of fire.

· 10.3 Possibility of hazardous reactions No dangerous reactions known.

· 10.4 Conditions to avoid Heat.

· 10.5 Incompatible materials: Strong oxidizing agents.

· 10.6 Hazardous decomposition products:

Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

Oral	LD50	2,400 mg/kg (rat)
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· Primary irritant effect:

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· Serious eye damage/irritation

Causes serious eye irritation.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

EC50/48 h	1.01 mg/l (crustacean)
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LC50/96 h	14.6 mg/l (fish)
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· **12.2 Persistence and degradability** 983 (BCF)

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 7)

CHEN



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Revision: 05.05.2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. from page 6)

· Ecotoxicological effects:**· Remark:** Toxic for fish**· Additional ecological information:****· General notes:**

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

· 12.5 Results of PBT and vPvB assessment**· PBT:** Not applicable.**· vPvB:** Not applicable.**· 12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****· 13.1 Waste treatment methods****· Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

· Uncleaned packaging:**· Recommendation:** Dispose of in accordance with national regulations.**SECTION 14: Transport information****· 14.1 UN-Number****· ADR, IMDG, IATA****· ADR**

UN3082

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2,4-Dichlorotoluene)**· IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2,4-Dichlorotoluene), MARINE
POLLUTANT**· IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2,4-Dichlorotoluene)**· 14.3 Transport hazard class(es)****· ADR, IMDG, IATA****· Class**

9 Miscellaneous dangerous substances and articles.

(Contd. on page 8)

—CHEN—



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Version number 1

Revision: 05.05.2020

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20°C, 25°C**

(Contd. from page 7)

· Label	9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-DICHLOROTOLUENE), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety

(Contd. on page 9)

CHEN



Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 05.05.2020

Version number 1

Revision: 05.05.2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. from page 8)

or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· **Sources**

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.

· **Data compared to the previous version altered.** All sections have been updated.

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The below Safety Data Sheet is according to
OSHA HCS



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

1 Identification

- **Product identifier**
 - **Product name:** Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C
 - **Part number:** MT-ME-51338013
 - **CAS Number:** 95-73-8
 - **EC number:** 202-445-8
 - **Application of the substance / the mixture** Reference material for laboratory use only
 - **Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
VHG
LGC Standards
276 Abby Road
Manchester, NH 03103
UNITED STATES OF AMERICA
 - **Information department:**
Product safety department
eMail : sds-request@lgcgroup.com
 - **Emergency telephone number:**
For Hazardous Materials or Dangerous Goods Incident
Spill, Leak, Fire Exposure, or Accident
Call CHEMTREC:
USA & Canada 1-800-424-9300
Rest of the world +1 703-741-5970
- Tel : +1 (603) 622-7660
Fax : +1 (603) 622-5180
Email : lgcusa@lgcgroup.com
Web : lgcstandards.com

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Flam. Liq. 4 H227 Combustible liquid.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 1)

· Hazard pictograms



GHS07 GHS09

· Signal word Warning

· Hazard statements

H227 Combustible liquid.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from flames and hot surfaces. – No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2

Fire = 2

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



HEALTH 2 Health = 2

FIRE 2 Fire = 2

REACTIVITY 0 Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Substances

· CAS No. Description

95-73-8 2,4-Dichlorotoluene

· Identification number(s) -

· EC number: 202-445-8

· RTECS: XT0730000

(Contd. on page 3)



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 2)

· **Additional information:**

Registration, Evaluation, Authorization and Restriction of Chemicals EC1907/2006. A REACH registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Rinse mouth. Do not induce vomiting.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:** Substance is not listed.

· **PAC-2:** Substance is not listed.

(Contd. on page 4)



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

· **PAC-3:** Substance is not listed.

(Contd. of page 3)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Please refer to the manufacturers certificate for specific storage and transport temperature conditions.
Store only in the original receptacle unless other advice is given on the CoA.
Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Not required.
Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374

(Contd. on page 5)

US

**Safety Data Sheet**
acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 4)

*Protective gloves*

- **Material of gloves** Fluorocarbon rubber (Viton)
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**

*Tightly sealed goggles***9 Physical and chemical properties**· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Liquid
· Color:	Colorless
· Odor:	Aromatic
· Odor threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

· Melting point/Melting range:	-13 °C (8.6 °F)
· Boiling point/Boiling range:	200 °C (392 °F)

· **Flash point:** 79 °C (174.2 °F)· **Flammability (solid, gaseous):** Not determined.· **Ignition temperature:** >450 °C (>842 °F)· **Decomposition temperature:** Not determined.· **Auto igniting:** Not determined.· **Danger of explosion:** Not determined.· **Explosion limits:**

· Lower:	1.9 Vol %
· Upper:	4.5 Vol %

· **Vapor pressure at 50 °C (122 °F):** 4 hPa (3 mm Hg)· **Density at 20 °C (68 °F):** 1.25 g/cm³ (10.43125 lbs/gal)

(Contd. on page 6)

US



Safety Data Sheet

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Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 5)

· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water at 20 °C (68 °F):	0.008 g/l
· Partition coefficient (n-octanol/water):	4.24 Log Pow
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
Stable under normal conditions.
No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
Formation of toxic gases is possible during heating or in case of fire.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** Formation of toxic gases is possible during heating or in case of fire.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Oral	LD50	2,400 mg/kg (rat)
------	------	-------------------
- **Primary irritant effect:**
 - **on the skin:** Based on available data, the classification criteria are not met.
 - **on the eye:** Irritating effect.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.



Safety Data Sheet

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Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 6)

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

EC50/48 h 1.01 mg/l (crustacean)

LC50/96 h 14.6 mg/l (fish)

· **Persistence and degradability** 983 (BCF)

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Dispose in accordance with national regulations.

14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA**

· **DOT**

UN3082

Environmentally hazardous substance, liquid, n.o.s. (2,4-Dichlorotoluene)

· **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-Dichlorotoluene)

(Contd. on page 8)



Safety Data Sheet


acc. to OSHA HCS

Printing date 05/05/2020

Reviewed on 05/05/2020

Product name: Density / Refractive Index Combined Standard: 2,4-Dichlorotoluene @ 15°C, 20°C, 25°C

(Contd. of page 7)

· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-Dichlorotoluene), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-Dichlorotoluene)
· Transport hazard class(es)	
· DOT, ADR, IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	
· DOT, ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	Yes (DOT) Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Remarks:	Special marking with the symbol (fish and tree).
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-DICHLOROTOLUENE), 9, III

US

(Contd. on page 9)



Safety Data Sheet

acc. to OSHA HCS

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(Contd. of page 8)

15 Regulatory information

- *Safety, health and environmental regulations/legislation specific for the substance or mixture*
- *Sara*
- *Section 355 (extremely hazardous substances): Substance is not listed.*
- *Section 313 (Specific toxic chemical listings): Substance is not listed.*
- *TSCA (Toxic Substances Control Act): ACTIVE*
- *Hazardous Air Pollutants Substance is not listed.*
- *Proposition 65*
- *Chemicals known to cause cancer: Substance is not listed.*
- *Chemicals known to cause reproductive toxicity for females: Substance is not listed.*
- *Chemicals known to cause reproductive toxicity for males: Substance is not listed.*
- *Chemicals known to cause developmental toxicity: Substance is not listed.*
- *Carcinogenic categories*
- *EPA (Environmental Protection Agency) Substance is not listed.*
- *TLV (Threshold Limit Value established by ACGIH) Substance is not listed.*
- *NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.*
- *Hazard pictograms*



GHS07 GHS09

- *Signal word* Warning
- *Hazard statements*
 - H227 Combustible liquid.*
 - H319 Causes serious eye irritation.*
 - H411 Toxic to aquatic life with long lasting effects.*
- *Precautionary statements*
 - P210 Keep away from flames and hot surfaces. – No smoking.*
 - P273 Avoid release to the environment.*
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.*
 - P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 - P403+P235 Store in a well-ventilated place. Keep cool.*
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- *Chemical safety assessment: A Chemical Safety Assessment has not been carried out.*

16 Other information

The information in this Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining

(Contd. on page 10)



Safety Data Sheet

acc. to OSHA HCS

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(Contd. of page 9)

the application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, we cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. We warrant that the chemical meets the specifications set forth on the label. We (LGC/VHG/ARMI) disclaim any other warranties, expressed or implied with regard to the product supplied hereunder, its merchantability or its fitness for a particular purpose. The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. Read all precautionary information.

• **Date of preparation / last revision** 05/05/2020 / -

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

• **Sources**

Tables 3.1 and 3.2 from Annex 6 of EC 1272/2008, EC 1907/2006, EH40/2005 as amended 2011, Registry of Toxic Effects of Chemical Substances (RTECS), The Dictionary of Substances and their Effects, 1st Edition, IUCLID.

• **Data compared to the previous version altered.** All sections have been updated.