Safety Data Sheet

SDS has been prepared in accordance with Regulation (EC) No. 453/2010

This Safety Data Sheet is written in reference to a sealed glass ampoule containing 10 ml of the product named below.

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Substance name: 2,4-Dichlorotoluene

Synonyms:	**Product type:**	**Date revised:** Jun 2022
N/A	Liquid density standard	**Previous:** Aug 2021
EC No: 202-445-8	**CAS No.:** 95-73-8	

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

Relevant identified uses: For use in the calibration of density meters.

1.3 Details of the supplier of the Safety Data Sheet

Company:	H&D Fitzgerald Ltd.
Address:	Cefn Du, Tremeirchion, St Asaph, Denbighshire, LL17 0US, UK
Telephone #:	+44 (0)1352 720 774
Email address:	admin@density.co.uk

1.4 Emergency telephone number

+44 (0)1352 720 774

Section 2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No1272/2008 [CLP]:

Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Pictogram:

Signal word:		none
Hazard statement(s):	H441	Toxic to aquatic life with long lasting effects.
Precautionary statement(s):	P273	Avoid release to the environment

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3 Composition / Information on ingredients

Substance name: 2,4-Dichlorotoluene	**Synonyms:** none

C.A.S. No.	**EINECS No.**
95-73-8	202-445-8

For full text of H-statements mentioned in this section, see Section 16.

Formula: $C_7H_6Cl_2$

Molecular Weight: 161.03 g/moll

Section 4 First aid measures

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Following inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.Consult a physician.

Following ingestion: Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Rinse mouth with water. Consult a physician.

Following eye contact: Flush eyes with water as a precaution.

Following skin contact: Wash off with soap and plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

Section 5 Fire fighting measures

5.1 Extinguishing media

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

Unsuitable media: Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas
Combustible.

5.3 Advice for firefighters

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information Use water spray to cool unopened containers.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand,earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7 Handling and storage

7.1 Precautions for safe handling

Handling precautions: Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations: Liquid density standard for calibration of density meters.

Section 8 Exposure controls and personal protection

8.1 Control parameters

Components with work place control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye/Face protection: Wear safety glasses with side shields conforming to EN166.

Hand protection: Handle with gloves conforming to EN374.

Other skin protection: Use of protective clothing is good industrial practise.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practise.

Wash hands with soap before breaks and at the end of the workday.

Environmental exposure controls

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

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Colourless, liquid	**Odour:** strong	**Odour threshold:** no data available	**pH:** no data available
Melting point: no data available	**Boiling point & range:** 200 °C - lit.	**Flash point:** 79°C	**Evaporation rate:** no data available
Flammability: no data available	**Upper/lower flammability or explosive limits:** no data available	**Vapour pressure:** no data available	**Relative vapour density:** no data available
Density of liquid: ≈1.246 g/mL at 25 °C	**Solubility:** no data available	**Partition coefficient: n-octanol/water** no data available	**Auto-ignition temperature:** no data available
Decomposition temperature: no data available	**Viscosity:** no data available	**Explosive properties:** no data available	**Oxidising properties:** no data available

9.2 Other information

no data available

Section 10 Stability and reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	No data available
10.4 Conditions to avoid	Heat, flames and sparks.
10.5 Incompatible materials	No data available
10.6 Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas Other decomposition products - No data available In the event of fire: see section 5

Section 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - > 2400 mg/kg Remarks: (RTECS) absorption Dermal: absorption
Skin corrosion/irritation:	slight irritation
Serious eye damage/irritation:	slight irritation
Germ cell mutagenicity	
Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	No data available.
Specific target organ toxicity – single exposure:	Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath
Specific target organ toxicity – repeated exposure:	No data available.
Aspiration hazard:	No data available.
Additional information:	RTECS: XT0730000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Systemic effects: Headache, Nausea, Vomiting, Dizziness, drop in blood pressure, Convulsions, narcosis, Coma, death Further data: Other dangerous properties can not be excluded.

Section 12 Ecological information

2,2,4 Trimethylpentane is unlikely to present any ecological risk in the quantity supplied in a 10 ml ampoule.

12.1 Toxicity	Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0.6 mg/l - 48 h Remarks: (Lit.)
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects	Toxic to aquatic life with long lasting effects. Discharge into the environment must be avoided.

Section 13 Disposal considerations	
General requirements:	Observe all national and local environmental regulations.
Contaminated packaging:	Dispose of as unused product.

Section 14 Transport information		
UN Number	**UN proper shipping name**	**Transport hazard class(es)**
Not dangerous goods	Not dangerous goods	Not dangerous goods
Environmental hazards	**EMS-No:**	**Packing group**
Not dangerous goods	Not dangerous goods	Not dangerous goods

Section 15 Regulatory information	
15.1 Safety health and environmental regulations/legislation specific for the substance or mixture	
	This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010. REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)
15.2 Chemical safety assessment	
	No chemical assessment has been carried out for this substance by the supplier.

Section 16 Other information	
Text of H-code(s) mentioned in Section 2 & 3	
H411	Toxic to aquatic life with long lasting effects.
Reason for revision:	Updated to comply with Regulation (EC) No. 453/2010.
Disclaimer	
H&D Fitzgerald Ltd believes that data given here is accurate. It is derived from published information about 2,4-Dichlorotoluene. No warranty, expressed or implied, is intended. The data is provided for your information and consideration when using 2,4-Dichlorotoluene as a liquid density standard for the calibration of density meters. H&D Fitzgerald Ltd assumes no legal responsibility for its use.	