



SAFETY DATA SHEET

TRICHLOROACETIC ACID

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: TRICHLOROACETIC ACID
PART No.: RM278
SYNONYMS, TRADE NAMES: TRICHLOROETHANOIC ACID
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

EU INDEX No.: 607-004-00-7
EEC (EINECS) No. 200-927-2
CAS No.: 76-03-9

3. HAZARDS IDENTIFICATION:

Causes severe burns. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

INHALATION: Remove affected person from exposure, rest and keep warm. If recovery not rapid or complete seek medical attention.

INGESTION: DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). Obtain medical attention if adverse symptoms occur.

SKIN: Remove contaminated clothing. Wash affected area with plenty of soap and water. If irritation persists, seek medical attention. Launder clothing before re-use.

EYES: Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.

5. FIRE FIGHTING MEASURES:

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| EXTINGUISHING MEDIA: | Use extinguishing media suitable against surrounding fire or the cause of fire. |
| SPECIAL FIRE FIGHTING PROCEDURES: | Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil according to local regulations. |
| HAZARDOUS COMBUSTION PRODUCTS: | Toxic or corrosive vapours may be released in fire situation. - chlorine and chlorine compounds.. |
| PROTECTIVE MEASURES IN FIRE: | Fire fighters should wear self-contained breathing apparatus. |

6. ACCIDENTAL RELEASE MEASURES:

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| PERSONAL PRECAUTION IN SPILL: | Avoid contact with eyes. Wear appropriate protective clothing. |
| PRECAUTIONS TO PROTECT ENVIRONMENT: | Prevent contamination of soil, drains and surface water. |
| SPILL CLEANUP METHODS: | Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Wash the area clean with water and detergent, observing environmental requirements. |

7. HANDLING AND STORAGE:

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| USAGE PRECAUTIONS: | HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Ensure good ventilation and local exhaust extraction in work place. |
| STORAGE PRECAUTIONS: | Store in a cool dry place. In (original) container securely sealed to avoid dusting. |

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

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| VENTILATION: | Work in a fume cupboard or use local exhaust ventilation. |
| PROTECTIVE GLOVES: | Use impervious gloves made of butyl rubber or PTFE (teflon). |
| EYE PROTECTION: | Approved chemical safety goggles or face protection. |
| OTHER PROTECTION: | Wear personal protective equipment appropriate to the quantity of material handled. |
| HYGIENIC WORK PRACTICES: | SKIN PROTECTION - apply barrier cream to hands and exposed skin. Regularly vacuum dust to minimise the potential of air-borne exposure. |

9. PHYSICAL AND CHEMICAL PROPERTIES:

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| APPEARANCE: | White crystalline granules. |
| ODOUR/TASTE: | Pungent. |

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| MELT/FREEZ. POINT (°C, interval): | mp. - 54 - 56°C | | |
| DENSITY/SPECIFIC GRAVITY (g/ml): | 1.63 | Temperature (°C): | |
| pH-VALUE, DILUTED SOLUTION: | < 1 | Concentration % M: | (5% aqueous solution) |
| SOLUBILITY DESCRIPTION: | Very soluble in water. Aqueous solutions are acidic. | | |
| FLASH POINT (°C): | > 110°C | Method: | |
| PARTITION COEFF. (log Pow): | 1.33 | | |

10. STABILITY AND REACTIVITY:

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| STABILITY: | Stable under normal conditions of use. |
| CONDITIONS TO AVOID: | Heating can release hazardous gases. |
| MATERIALS TO AVOID: | Oxidising agents. Strong bases. |
| HAZARDOUS DECOMP. PRODUCTS: | Thermal decomposition may release hydrogen chloride, oxides of carbon, halogenated hydrocarbons. |

11. TOXICOLOGICAL INFORMATION:

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| TOXIC DOSE - LD 50: | 3320 mg/kg (oral rat) |
| HEALTH HAZARDS, GENERAL: | Will cause irritation to eyes, skin, nasal passage and mucous membranes. |
| INHALATION: | Extremely irritating to mucous membranes and respiratory system. Inhalation may cause coughing and dyspnoea.. |
| INGESTION: | May cause burns to mucous membranes, throat and stomach. damage to kidneys and liver. |
| SKIN: | Causes burns. Aqueous solutions are acidic and have corrosive effect on skin contact. |
| EYES: | Corrosive to eyes. |
| OTHER HEALTH EFFECTS: | Evidence of reproductive effects. Suggested risk of embryotoxic effects. Avoid handling in pregnancy. |
| MEDICAL SYMPTOMS: | Symptoms or effects of exposure may be delayed in onset. |

12. ECOLOGICAL INFORMATION:

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| | LC50 48 hours fish > 1000 mg/l |
| | EC50 Daphnia magna 110 mg/l |
| ECOLOGICAL INFORMATION: | Harmful effect due to pH shift. |
| BIO ACCUMULATION: | Low bioaccumulation potential. |
| DEGRADABILITY: | Poor biological degradability. |

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS: This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.

WASTE CLASS: WASTE CODE: 0705** HAZARDOUS PROPERTY: H8, H14

14. TRANSPORT INFORMATION:

UK ROAD PACK GR.: II

ADR CLASS No.: 8

ADR CLASS: Class 8: Corrosive substances.

ADR ITEM No.: 31°(b)

HAZARD No. (ADR): 80 Corrosive or slightly corrosive substance.

ADR MARGINAL: 2801

ADR LABEL No.: 8

HAZCHEM CODE: 2X

PROPER SHIPPING NAME I: TRICHLOROACETIC ACID, TCA

UN No. SEA: UN 1839

IMDG CLASS: 8

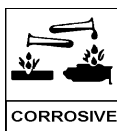
IMDG PACK GR.: II

UN No., AIR: UN-ID 1839

ICAO CLASS: 8

AIR PACK GR.: II

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:

RISK PHRASES: R-35 Causes severe burns.
R-50 Very toxic to aquatic organisms.
R-53 May cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES: S-1/2 Keep locked up and out of the reach of children.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.
S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S-60 This material and its container must be disposed of as hazardous waste.
S-61 Avoid release to the environment. Refer to special instructions/ Safety Data Sheets.

UK REGULATORY REFERENCES: Chemicals (Hazard Information & Packaging) Regulations 1993. Classification, Packaging and Labelling Regulations 1984.

16. OTHER INFORMATION:

INFORMATION SOURCES: This product has been classified in accordance with CHIP3 regulations.

REVISION COMMENTS: Edition 01; Revised item(s):

ISSUED BY: MK

SDS No.: 515

DATE: 12/07/02

DISCLAIMER: The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.