

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION & THE COMPANY

Name : **QUADROP**

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2. COMPOSITION / INFORMATION ON INGREDIENTS

| INGREDIENT NAME | CONTENTS (%) | HEALTH (class) | RISK (R No.) |
|---------------------------------------|-----------------|-------------------|-----------------|
| Monocarbamide Dihydrogen sulphate. | 78 | Xn | 22 |
| Other non-hazardous ingredients | 22 | | |

3. HAZARDS IDENTIFICATION

Physical/Chemical Hazards: Corrosive to aluminium, copper and zinc releasing hydrogen gas. No other conditions to avoid.

Environmental Hazards: No data available for this product. Not listed as a marine pollutant. Degradation products less harmful than original product.

Human health hazards: Harmful if swallowed. Prolonged skin contact may cause severe burns. Severe eye irritant. Not known to be carcinogenic, mutagenic or teratogenic .

4. FIRST AID MEASURES

Skin: Remove contaminated clothing. Wash immediately with water, followed by soap & water. Seek medical attention.

Eyes: Irrigate well with water or eyewash solution, holding the eyelids apart for at least 10 minutes. Obtain medical attention.

Ingestion: Wash out mouth with plenty of water and drink large quantities of water, milk or milk of magnesia. Do not induce vomiting. Obtain medical attention.

Inhalation Move to fresh air and keep warm until symptoms of distress subside. Obtain

medical attention, especially if coughing persists.

5. FIRE -FIGHTING MEASURES

Suitable extinguishing media: Any
Unsuitable extinguishing media: None
Special exposure hazard: Product may decompose >110C to produce carbon dioxide gas and prolonged heat will release oxides of carbon, nitrogen and sulphur.
Special protective equipment: Self contained breathing apparatus.
Suitable gloves and eye/face protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation. Wear suitable gloves and eye/face protection, product releases small amounts of carbon dioxide gas on storage, wear suitable respiratory equipment if adequate ventilation is not available.
Environmental precautions: Do not let product enter drains.
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, sawdust). Shovel into a suitable container for disposal. Rinse affected area with plenty of water.

7. HANDLING & STORAGE

Handling: Avoid contact with eyes & skin.
Storage: Keep away from incompatible materials, aluminium, copper and zinc. Product crystallises at 5C but is also capable of being a supercooled liquid, product reliquifies with no detrimental effects. Store in a well ventilated area, due to possible build up of carbon dioxide gas.
Packaging material: Polythene, Polypropylene or 316l grade stainless steel.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| INGREDIENT | OEL 8 Hour TWA | 15 minute STEL |
|---------------------|------------------|------------------|
| Monocarbamide | None established | None established |
| Dihydrogen sulphate | | |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

PERSONAL PROTECTION:

Hands : PVC or rubber gloves
Eyes : Safety glasses/face shield
Skin : Overalls
Respiratory: In case of insufficient ventilation, wear suitable respiratory equipment.

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: Brown clear liquid
ODOUR: None
VAPOUR PRESSURE: Not available
RELATIVE DENSITY: 1.52
pH: 1
MISCIBILITY WITH WATER: Totally miscible in all proportions.

10. STABILITY & REACTIVITY

Stability: Stable at normal conditions. May crystallise below 5C.
Conditions to avoid: Heating can release hazardous gases.
Materials to avoid: Aluminium, copper and zinc will release hydrogen gas.
Hazardous decomposition: Does not decompose readily, decomposition products are not classified as harmful.

11. TOXICOLOGICAL INFORMATION

Toxicity Data: LD₅₀ oral rat 350mg/KG.
Acute dermal LD50 rabbit >2000mg/KG
Carcinogenicity: Not known to cause any problems.
Mutagenicity/
Teratogenicity:

ACUTE TOXICITY

Eyes: Irritation & tears, possible corneal damage.
Skin: Prolonged contact may result in severe burns.
Ingestion: Nausea & vomiting.
Inhalation: Irritation of the respiratory system.

CHRONIC TOXICITY

Eyes: Irritation.
Skin: Irritation.
Ingestion: Nausea and vomiting.
Inhalation:
(fumes) Suffocation from lack of oxygen, due to carbon dioxide inhalation.
(aerosol): Irritation of nose throat and respiratory tract.

12. ECOLOGICAL INFORMATION

LC50 (fish): No data
Mobility: Water soluble
Persistence & degradability: Degrades to form less harmful products than product itself.
Ecotoxicity: No information available, not classified as an environmental hazard.

13. DISPOSAL CONSIDERATIONS

The product should be disposed of with reference to Local and National Regulations.

14. TRANSPORT INFORMATION

ADR CLASSIFICATION: 8 UN No: 1760

UN Packing Group: III

TRANSPORT NAME: Monocarbamide Dihydrogen sulphate N.O.S.

15. REGULATORY INFORMATION

CORROSIVE



Risk phrases: R35 - Causes severe burns
Safety phrases: S25 - Avoid contact with eyes
S46 - If swallowed, seek medical attention immediately and show this container or label.
S53 - Avoid exposure - obtain special instructions before use

16. OTHER INFORMATION

Recommended uses: QUADROP is used in water treatment.
Sources of data: Manufacturers data sheets.
National and international regulations *including:*
CHIP 3 regulations

The above information is based upon current knowledge at the time of publication and is given in good faith. However, no warranty is made, either expressed or implied, regarding its accuracy, or the results to be obtained from the use of such information.

The information contained in this data sheet does not constitute as an assessment of workplace risks.

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