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MATERIAL SAFETY DATA SHEET

Section 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

COMPANY Delshine Chemicals ABN NUMBER 78-805-588-343

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TELEPHONE NUMBER (08) 9309 4222

EMERGENCY TELEPHONE 041 992 7281 (After hours)

EMAIL delshine-chemicals@bigpond.com
WEB SITE www.delshinechemicals.com

BRAND NAME - OXALIC ACID TRADE NAME - OXALIC ACID

SHIPPING NAME (section 14) OXALIC ACID DIHYDRATE

USE - CLEANING METAL EQUIPMENT, BLEACHING TEXTILES ETC.

RESTRICTIONS - KEEP AWAY FROM ACIDS, OXIDISING AGENTS AND ALKALIS

Section 2 HAZARDS CLASSIFICATION / INDENTIFICATION

CLASSIFIED AS: HAZARDOUS According to the criteria of NOHSC

UN NUMBER: Not Applicable

RISK PHRASES: R21/22 Harmful if contact with skin and if swallowed

R41 Risk of serious eye damage

SAFETY PHRASES: **S1/2** Keep locked up and out of reach of children

S24/25 Avoid contact with skin and eyes

Section 3 COMPOSITION / INFORMATION OF INGREDIENTS

Chemical Entity: CAS No: Proportion (% mass)

Oxalic Acid 6153 – 56 – 6 100

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Section 4

Description of necessary measures according to routes of exposure.

Ingestion – Rinse mouth with water. Give plenty of water to drink. Do not induce vomiting. Seek immediate medical assistance.

FIRST AID MEASURES

Eyes – Immediately flush eyes with plenty of water holding eyelids open. Seek immediate medical assistance.

Skin – Remove contaminated clothing. Flush affected area with plenty of water. Seek immediate medical assistance.

Inhaled – Remove victim from exposure to fresh air. If breathing is difficult give oxygen. Seek immediate medical assistance.

Advice to Doctor – Treat symptomatically based on individual reactions of patient and judgement of doctor. If victim is conscious give immediately by mouth a fine suspension in water of a non toxic calcium compound such as calcium lactate, chalk, plaster or milk. Large amounts of calcium are required to inactivate oxalate by precipitating it as the insoluble calcium oxalate salt.

Aggravated medical conditions caused by exposure.

Long tern exposure to oxalic acid solutions by ingestion , skin absorption and inhalation is linked to stone formation (insoluble crystals of calcium oxalate salt or calculi) in the kidney and urinary tract. Painful abdominal spasms during the passing of the stone and painful and difficult urination may occur. Secondary products cause damage to kidneys.

First Aid Facilities: Ensure an eye bath and safety shower are available and ready for use.

Section 5

FIRE FIGHTING MEASURES

Extinguishing Media . Product is a combustible solid.

In case of fire appropriate extinguishing media include; small fire – use dry chemical carbon dioxide, water spray or foam. Large fire – use water spray, fog or foam.

Hazard from combustion products

Combustible solids. Incompatible with oxidizing agents , acids , alkali , metals , iron , iron compounds, silver and sources of ignition. May be ignited by friction , heat , sparks or flame. May be re –ignited after fire is extinguished. Solids may melt and flow when heated or involved in a fire. Containers may explode when heated. Fire may produce irritating , poisonous and / or corrosive gases , carbon monoxide , carbon dioxide and formic acid.

Special protective precautions and equipment .

Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.

HAZCHEM CODE: Not applicable

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Section 6

ACCIDENTAL RELEASE MEASURES

Emergency Procedures – Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation . Avoid generating dust. Do not allow product to reach drains , sewers or waterways. If the product does enter a waterway advise the Environmental Protection Authority or your local Waste Management Authority. Use spark proof tools and equipment. Methods and materials for containment and clean up – Contain and sweep . shovel up spill with dust binding material or use an industrial vacuum cleaner. Transfer to suitable , labeled container and hold for safe disposable. Aqueous solutions of organic acids should be neutralized with sodium hydrogen carbonate or with sodium hydroxide. Before filling into filtrate , checking the Ph with Ph universal indicator strips. Aromatic carboxylic acids should be precipitated with dilute hydrochloric acid and vacuum filtered off.

Section 7

HANDLING AND STORAGE

Precautions for safe handling – Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment.

Conditions for safe storage including and incompatibles — Store in a cool dry well ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage . Store away from incompatible materials including oxidizing agents, acids, bases , alkali metals , iron , iron compounds, silver and sources of ignition. Protect from direct sunlight, moisture , and static discharge. This product is not classified dangerous for transport according to the Australian Code of the Transport of Dangerous Goods by Road and Rail.

Container Type - Packaging must comply with regulations of Hazardous Substances (Packaging) Regulations 2001. Store in original packaging as approved by manufacturer.

Section 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards

No exposure standards has been established for this product by the Australian Safety and Compensation Council (ASCC) formerly known as NOHSC. However the exposure standards for dust not otherwise specified is 10mg/m3 (For inspirable dust) and 3mg/m3 (for respirable dust)

Biological Limits Values –

No information available on biological limits for this product.

Engineering Controls – A system of local and or general exhaust is recommened to keep employee exposure as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its sources preventing dispersion of it into the general work area.

Personal Protection –

Respirators – Wear an approved respirator if engineering controls are inadequate (EN 141/EN149) **Eye** – Safety glasses with side shields (EN 166)

Hands – Wear chemical resistant gloves (EN374)

Clothing – Impervious long sleeved clothing, apron and safety boots (EN 4656)

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Section 9 PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE White Crystals **ODOUR** Odourless

PH - 0.7 50g/l **VAPOUR PRESSURE** 0.0312 PA (@25°C)

BOILING POINT °C No data VAPOUR DENSITY Not available

FREEZING POINT °C Not available SOLUBILITY 108 g/l °C

SPECIFIC GRAVITY No data MELTING POINT No Data

ADDITIONAL INFORMATION

Dry oxalic acid is not corrosive to metals, Oxalic acid in solution is corrosive to metals

Section 10 STABILITY & REACTIVITY

Product is stable under normal conditions of use, storage and temperatures.

Conditions to Avoid – Avoid excessive heat , generating dust , direct sunlight , moisture , static discharge and high temperatures .

Incompatible Materials – Incompatible with oxidizing agents , acids , bases , alkalie , salts of oxyalogen acids , ammonia and sources of ignition.

Hazardous Decompositions Products – Product may generate carbon monoxide , carbon dioxide and formic acid.

Hazardous Reactions – Hazardous polymerization will not occur.

Section 11 TOXICOLOGICAL INFORMATION

Toxicity data -

Oral LD50 Male Rat : 475mg/kg
Oral LD50 Female Rat : 375mg/kg
Skin LD50 Rabbit : 2000mg/kg

Oral LD50 Rat 5% sol: 9.5mg/kg (Vernot)

Ingestion – Harmful if swallowed. May cause irritation of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract. May cause rapid absorption. After absorption may cause agitation spasm, nausea, vomiting, cardiovascular failure, collapse. Disturbed electrolyte balance.

Eye - Severe eye irritant. May cause redness , pain and damage to the cornea. If damage is restricted to the outer layer or the eye recovery may occur within a few days. Prolonged contact with oxalic acid solutions can produce irreversible eye damage.

Skin – Harmful in contact with skin. Irritant and caustic effects , tissue damage. Danger of skin absorption . Solutions of $5-10\,\%$ acid are irritating to the skin after prolonged exposure and can cause corrosive injury. Excessive contact may produce a delayed localized pain , discolouration of the skin with fingernails becoming brittle and blue coloured , ulcers and gangrene.

Inhaled – Irritation of mucous membranes, coughing and dyspnoea.

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Section 12

ECOLOGICAL INFORMATION

No ecological information available on this product.

Persistence and degradability -

No information available on persistence / degradability for this product.

Environmental Fate – Avoid contaminating waterways drains and sewers

Bioaccumulative Potential – No information available on bioaccumulation for this product.

Section 13

DISPOSAL CONSIDERATIONS

Dispose of in accordance with all local, state and federal regulations.

Special Precautions for land fill or incineration –

The waste code classification is to be carried out according to the European Waste Catalodgue (EWC) specifically for each branch of industry and each type of process.

Section 14

TRANSPORT INFORMATION

UN NUMBER : Not Applicable

UN PROPER SHIPPING NAME: Oxalic Acid Dihydrate

CLASS: None PACKING GROUP: None HAZCHEM CODE: None

Section 15

REGULATORY INFORMATION

POISONS SHEDULE (SUSDP) 6

ERG Not available

AICS Name Ethanedioic Acid , Dihydrate

NZ TOXIC SUBSTANCE 3

Classified as hazardous according to the criteria of ASCC (Australian Safety and Compensation Council)

Formerly NOHSC.

Additional information – No data available

Section 16

OTHER INFORMATION

DATE OF LAST REVISION OF MATERIAL SAFETY DATA SHEET: 14thFebruary 2016

CONTACT POINT – Les Buss – TELEPHONE (08) 9309 4222

AUTHORISATION FOR ISSUE ______ DATE ____/___

Les Buss

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