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MATERIAL SAFETY DATA SHEET

This MSDS supersedes MSDS revision dated 6 October, 2000

IDENTIFICATION

PRODUCT NAME:

OXALIC ACID

OTHER NAMES: Ethanedioic Acid

UN Number:	**N/A**
Class:	**N/A**
Subsidiary Risk:	**N/A**
Packaging Group:	**N/A**
EPG:	**N/A**
Hazchem Code:	**N/A**
Poison Schedule:	**6**

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

PRODUCT CODE: OXA

USE: Automobile radiator cleaners, general metal and equipment cleaning, purifying agent and intermediate for many compounds, leather tanning, catalyst, laboratory reagent, stripping agent for permanent press resins, bleaching of textiles, rare earth processing, printing and dyeing auxilliary.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colourless fine crystals

BOILING POINT: No data available

MELTING POINT: 101ºC

VAPOUR PRESSURE: Negligible

VAPOUR DENSITY: Not pertinent

SPECIFIC GRAVITY: 1.65

SOLUBILITY (WATER): Soluble

FLASH POINT: None

EXPLOSION LIMITS: None

VOLATILES: None

pH: Not pertinent

INGREDIENTS

Oxalic acid	144-62-7

HEALTH HAZARD INFORMATION

ACUTE

INGESTION

Solid or concentrated solutions are corrosive and may cause burning of the mouth, throat and stomach. Ingestion may cause coughing, choking sensations and vomiting of blood or blood in diarrhoea. Breathing difficulties, shock and convulsions may follow. Oxalic acid is regarded as a strong poison when taken internally and as little as 5 grams have proved fatal.

EYE

Severely irritating. Solid is corrosive and may cause severe burning of the eye.

Health Hazard Information continued

SKIN
Irritating after brief exposure. Prolonged contact may result in inflammation and burns.

INHALATION
Dust is irritating to the eyes, nose and throat. Inhalation may cause burning sensations in the eyes, nose and throat. Higher concentrations may cause coughing, choking and difficulty in breathing due to oedema of the lungs. Symptoms of oedema may have delayed onset.

CHRONIC

Inhalation and ingestion are the routes of entry into the body. Prolonged or repeated exposure may cause kidney damage, dermatitis, disturbances to the nervous system, headaches, ulceration and coughing.

Oxalic acid: LD50 (oral, rat): 375mg/Kg

ADVICE TO DOCTOR

The systemic effects are attributed to the removal by the oxalic acid of the calcium in the blood. The renal tubules obstructed by calcium oxalate. If ingestion has occured administer dilute solution of calcium, magnesium compound, e.g. milk of magnesia, calcium lactate or calcium gluconate.

FIRST AID PROCEDURES

INGESTION
NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO DRINK NOR ATTEMPT TO INDUCE VOMITING. If person is conscious, rinse mouth out with water ensuring that mouth wash is not swallowed. Give about 250mL (2 glasses) of water to drink. DO NOT attempt to induce vomiting. Seek URGENT medical attention.
Large quantities of calcium are reequired to inactivate oxalate.

EYE
IMMEDIATELY hold eyelids open and rinse the eye continuously with a gentle stream of clean running water for at least fifteen minutes. Seek URGENT medical attention. Continue irrigation of the eye during transportation to medical facilities.

SKIN
Remove contaminated clothing. Rinse the affected area with water then wash the skin thoroughly with soap and water. Use water alone, if soap is unavailable. Seek medical attention if any soreness or inflammation of the skin persists. Launder affected clothing before re-use.

INHALATION
Remove to fresh air. Keep warm and at rest. If breathing is laboured, hold in a half upright position (this assists respiration). Apply artificial respiration if breathing has stopped. Seek URGENT medical attention for all but the most minor cases of over-exposure.

PRECAUTIONS FOR USE

ENGINEERING CONTROL
Local exhaust (dust extraction) ventilation may be required if handling large quantities in such a way that the dust from the product becomes airborne. Otherwise, general (mechanical) ventilation is adequate.

PERSONAL PROTECTION
Full protective equipment including acid resistant safety goggles or face shield, gloves or gauntlets and overalls. A half face respirator with particulate filter is required if dust from the product is becoming airborne.

FLAMMABILITY
Non flammable. Decomposes (sublimes) at temperatures above approximately 150ºC. The product may react vigorously with silver compounds, strong oxidising agents and alkalis.

EXPOSURE STANDARDS
Oxalic acid (144-62-7): E.S. TWA: 1mg/m^3 ; STEL: 2mg/m^3.

SAFE HANDLING PROCEDURES

STORAGE
Transport is not regulated. Store out of direct sunlight in a cool well ventilated area. Segregate from oxidising agents and alkaline substances. Keep containers tightly sealed when not in use. Protect containers against physical damage.

SPILLS & DISPOSAL
SPILLS: Wear protective equipment as specified for handling. Sweep up the solid and re-use or dispose to approved land-fill.
DISPOSAL: If possible, return to supplier. Otherwise, dispose to approved land-fill.

FIRE EXPLOSION
Non-flammable.
Wear self contained breathing apparatus. Extinguish using whatever is suitable for the primary cause of the fire.

OTHER INFORMATION

HAZARD CLASSIFICATIO N

Xn	Harmful

RISK PHRASES

R20/21	Harmful in contact with skin and if swallowed.

SAFETY PHRASES

S24/25	Avoid contact with skin and eyes.

CONTACT POINT

Customer Service

(08) 9452 5200

Emergency Advice

(08) 9452 5200 7:30 – 4:30 Mon – Fri Western Standard Time

Poisons Information Centre: Australia 131 126 or New Zealand 03 4747 000