



SAFETY DATA SHEET

ZINC SULPHATE

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

PRODUCT NAME: ZINC SULPHATE
CHEMICAL NAME 2: ZINC SULPHATE HEPTAHYDRATE
PART No.: RM289
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
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2. COMPOSITION/INFORMATION ON INGREDIENTS

EU INDEX No.: 030-006-00-9
EEC (EINECS) No. 231-793-3
CAS No.: 7733-02-0

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin. 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

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. - oxides of sulphur.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION IN SPILL:	Avoid breathing dust.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent contamination of soil, drains and surface water.
SPILL CLEANUP METHODS:	Avoid dry sweeping or other methods which raise dust. Vacuum or wet-sweep and place into a suitable closable, labelled container for disposal. Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE

USAGE PRECAUTIONS:	HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid creating or raising dust. 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

INGREDIENT COMMENTS:	No specific OES assigned, however for dusts of any kind, ensure LTEL (8-hour TWA ref. period) level does not exceed 10 mg.m ³ for total inhalable dust or 4 mg.m ³ for respirable dust (or) as recommended in current edition of EH40.
VENTILATION:	Provide adequate general and local exhaust ventilation.
RESPIRATORS:	If unable to control dust emissions below OES limits, an approved dust protection to P2 level of protection is recommended.
PROTECTIVE GLOVES:	Use protective gloves.
EYE PROTECTION:	Use eye protection if eye contact is likely.
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

APPEARANCE:	White rhombic crystals, crystalline powder or granules.	
DENSITY/SPECIFIC GRAVITY (g/ml):	3.74	Temperature (°C):
SOLUBILITY DESCRIPTION:	Soluble in water. Aqueous solutions are acidic.	

10. STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions of use.	
HAZARDOUS DECOMP. PRODUCTS:	Thermal decomposition may release toxic and corrosive oxides of sulphur if heated above 600°C.	

11. TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD 50:	2150 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 lead to formation of oedema in the respiratory tract.	
INGESTION:	Ingestion may cause mucous membranes to bleed. Ingestion will cause gastric irritation and vomiting. Ingestion of (excessive amounts) may cause damage to kidneys and liver.	
HEALTH WARNINGS:	Symptoms may include drop in blood pressure, cardiovascular disorder, shortness of breath, cough, aching muscles, fever.	
MEDICAL SYMPTOMS:	Symptoms may not appear until several hours after exposure.	

12. ECOLOGICAL INFORMATION

Ecotoxicological data	LC50 24 hours fish (rainbow trout) 1.24 mg/l
	LC50 48 hours fish (rainbow trout) 2.4 - 5 mg/l
	LC50 96 hours fish (rainbow trout) 0.24 - 0.83 mg/l
	LC50 96 hours Daphnia 7.4 mg/l
ECOLOGICAL INFORMATION:	Very toxic to aquatic organisms.
BIO ACCUMULATION:	High bioaccumulation potential.
WATER HAZARD CLASSIFICATION:	Hazard to drinking water supply.

13. DISPOSAL CONSIDERATIONS

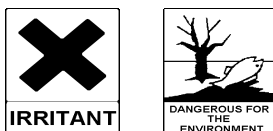
DISPOSAL METHODS:	This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.
WASTE CLASS:	WASTE CODE: 0705** HAZARDOUS PROPERTY: H4, H14

14. TRANSPORT INFORMATION

ADR CLASS No.:	9
ADR CLASS:	Class 9: Environmentally hazardous substances.
ADR PACK GR.	III
HAZARD No. (ADR):	90 Environmentally hazardous substance; miscellaneous dangerous substances.
ADR LABEL No.:	9
HAZCHEM CODE:	2X
PROPER SHIPPING NAME I:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (Zinc sulphate)
UN No. SEA:	UN 3077
IMDG CLASS:	9
IMDG PACK GR.:	III
UN No., AIR:	UN-ID 3077
ICAO CLASS:	9
AIR PACK GR.:	III

15. REGULATORY INFORMATION

LABEL FOR SUPPLY:



RISK PHRASES:	R-36/38 Irritating to eyes and skin. R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
SAFETY PHRASES:	S-2 Keep out of the reach of children. S-22 Do not breathe dust. S-25 Avoid contact with eyes. 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.(CHIP 2002)

REVISION COMMENTS: Edition 02a; correction to section 3 - withdrawal of incorrect reference to harmful property.

ISSUED BY: MK

SDS No.: 545

DATE: 03/06/03

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.