



## SAFETY DATA SHEET

Page 1 of 4

### ZINC SULPHATE

Revision 1  
Revision date 5-May-2010

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

**Product name** ZINC SULPHATE  
**Company** Norkem Limited  
Norkem House  
Bexton Lane  
Knutsford  
Cheshire WA16 9FB  
datasheet@norkem.com  
www.norkem.com  
**Telephone** 00 44 (0)1565 755550  
**Fax** 00 44 (0)1565 755496  
**Emergency telephone number** 01270 502891 UK Transport only  
**Product code** Z07-Z08-Z11

#### 2 HAZARDS IDENTIFICATION.

**Main hazards** Harmful if swallowed. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 3 . COMPOSITION / INFORMATION ON INGREDIENTS.

##### Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)	90-100%	7446-19-7		Xn; R22 Xi; R41 N; R50/53

#### 4. FIRST AID MEASURES

**Eye contact** May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.

**Skin contact** May cause irritation to skin. May cause dermatitis. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

**Ingestion** Harmful if swallowed. Ingestion may cause nausea and vomiting. Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

**Inhalation** Harmful by inhalation. Inhalation may cause nausea and vomiting. May cause dizziness and headache. Move the exposed person to fresh air. Seek medical attention.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Use as appropriate: carbon dioxide (CO<sub>2</sub>), dry chemical, foam.

**Fire hazards** Burning produces irritating, toxic and obnoxious fumes.

**Protective equipment** Self-contained breathing apparatus. Wear protective clothing.

Print date 11-Oct-2010

# ZINC SULPHATE

Revision 1  
Revision date 5-May-2010

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Wear suitable protective equipment. Avoid generating and breathing dust. Ensure adequate ventilation of the working area.
<b>Environmental precautions</b>	Do not allow product to enter drains. Prevent further spillage if safe.
<b>Clean up methods</b>	Avoid raising dust. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Avoid generating and breathing dust. Adopt best Manual Handling considerations when handling, carrying and dispensing.
<b>Storage</b>	Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures</b>	Ensure adequate ventilation of the working area.
<b>Occupational exposure controls</b>	COSHH - Due consideration should be given to your control systems and the need for assessment.
<b>Protective equipment</b>	Wear chemical protective clothing. Protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective equipment to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	Self-contained breathing apparatus. Wear protective clothing.
<b>Hand protection</b>	Chemical resistant gloves (PVC)
<b>Eye protection</b>	Approved safety goggles.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Description</b>	Crystals.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>pH</b>	4-5.2 @ 50 g/l H <sub>2</sub> O (20 C)
<b>Boiling point</b>	280°C
<b>Relative density</b>	3.2 g/cm <sup>3</sup> (20 C) Bulk: 500 kg/m <sup>3</sup>
<b>Water solubility</b>	soluble in water. 350 g/l @ 20 C.
<b>Melting point</b>	700°C

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Heat.
<b>Hazardous decomposition products</b>	Sulphur oxides.

# ZINC SULPHATE

Revision 1  
Revision date 5-May-2010

## 11. TOXICOLOGICAL INFORMATION

### Toxicological information

ZINC SULPHATE Oral Mouse LD50 = 245mg/kg

Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate) Oral Mouse LD50 = 2200 mg/kg  
Oral Rat LD50 = 2150 mg/kg**Eye contact** Irritating to eyes.**Skin contact** Irritating to skin.**Ingestion** Abdominal pain, nausea, vomiting. May cause irritation to skin, eyes and mucous membranes.**Inhalation** Inhalation may cause nausea and vomiting. Coughing, difficulty in breathing.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Harmful to aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

**General information** Dispose of in compliance with all local and national regulations.

## 14. TRANSPORT INFORMATION

### ADR/RID

UN 3077 Packing group III  
Class 9 Hazard ID 90  
Proper Shipping ENVIRONMENTALLY  
Name HAZARDOUS SUBSTANCE,  
SOLID, N.O.S, (Zinc Sulphate).

### IMDG

UN 3077 Packing group III  
Class 9 Marine pollutant .  
EmS Code F-A S-F


### IATA

UN 3077 Packing group III  
Class 9 Subsidiary risk -  
Packing Instruction 911 Maximum quantity 400 kg  
(Cargo)  
Packing Instruction 911 Maximum quantity 400 kg  
(Passenger)

## ZINC SULPHATE

Revision 1  
Revision date 5-May-2010

## 15. REGULATORY INFORMATION

<b>Labelling</b>	The product is classified in accordance with 67/548/EEC.
<b>Symbols</b>	Xn - Harmful; N - Dangerous for the environment 
<b>Risk phrases</b>	R22 - Harmful if swallowed. R41 - Risk of serious damage to eyes. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Safety phrases</b>	S2 - Keep out of the reach of children. S22 - Do not breathe dust. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39 - Wear eye/face protection. S46 - If swallowed, seek medical advice immediately and show this container or label. S60 - This material and its container must be disposed of as hazardous waste. S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

## 16. OTHER INFORMATION

<b>Text of risk phrases in Section 3.</b>	R22 - Harmful if swallowed. R41 - Risk of serious damage to eyes. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>General information</b>	The following information is provided to conform with article 13 of the EC Directive on Packaging and Packaging Waste 94/62/EC: * Wherever possible we use returnable packaging and pallets. Details of these are on our Sales Contracts * For any non-returnable packaging the cost of disposal is at your expense, but we do have a list of reprocessors available * In most cases, but not all, we are able to supply products in returnable packaging but the additional cost of this will be for the customers expense. Please ask for details with your specific requirements * Any products supplied in returnable packaging is clearly marked to this effect.
<b>Further information</b>	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
<b>Revision</b>	This document differs from the previous version in the following areas: 15 - risk phrases.