



## MATERIAL SAFETY DATA SHEET

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Zinc sulfate, Heptahydrate 25580

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** Zinc sulfate, Heptahydrate

**Catalog Numbers:**

Z/1550, Z/1600

**Synonyms:**

Sulfuric acid zinc salt (1:1) heptahydrate

**Company Identification:** Fisher Scientific UK

Bishop Meadow Road

Loughborough, Leicestershire

LE11 5RG, UK

For information, call: 01509 231166

For emergencies, call: 01509 231166

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	7446-20-0
Chemical Name	:	Zinc sulfate, Heptahydrate
%	:	100
EINECS#	:	231-793-3
Hazard Symbols	:	None Listed
Risk Phrases	:	None Listed

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Not available.

#### Potential Health Effects

**Eye:**

Causes eye irritation. May result in corneal injury.

**Skin:**

Causes skin irritation.

**Ingestion:**

Ingestion of large amounts may cause gastrointestinal irritation.

Low hazard for usual industrial handling.

**Inhalation:**

May cause respiratory tract irritation. Low hazard for usual industrial handling.

**Chronic:**

No information found.

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## SECTION 4 - FIRST AID MEASURES

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### Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

### Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

### Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

### Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### Notes to Physician:

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## SECTION 5 - FIRE FIGHTING MEASURES

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### General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

### Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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**General Information:** Use proper personal protective equipment as indicated in Section 8.

### Spills/Leaks:

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

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## SECTION 7 - HANDLING and STORAGE

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### Handling:

Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

### Storage:

Store in a dry area.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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### Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

### Personal Protective Equipment

#### Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to minimize contact with skin.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

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Physical State: Solid

Color: Colorless crystals

Odor: Odorless

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 122 deg F

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: Not available.

Solubility in water: Soluble in water

Specific Gravity/Density: 1.96

Molecular Formula: ZnSO4.7H2O

Molecular Weight: 287.5314

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**SECTION 10 - STABILITY AND REACTIVITY**

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**Chemical Stability:**

Stable.

**Conditions to Avoid:**

Excess heat.

**Incompatibilities with Other Materials:**

None reported with materials and contaminants which the material may reasonably come into contact.

**Hazardous Decomposition Products:**

Oxides of sulfur, toxic fumes of zinc oxide.

Hazardous Polymerization: Has not been reported.

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

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**RTECS#:**

CAS# 7446-20-0: ZH5300000

**LD50/LC50:**

CAS# 7446-20-0: Oral, mouse: LD50 = 200 mg/kg; Oral, rat: LD50 = 1260 mg/kg.

**Carcinogenicity:**

Zinc sulfate, Heptahydrate -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

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**SECTION 12 - ECOLOGICAL INFORMATION**

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**Ecotoxicity:**

No information found.

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

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Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

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**SECTION 14 - TRANSPORT INFORMATION**

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**IATA**

Not regulated as a hazardous material.

**IMO**

Not regulated as a hazardous material.

**RID/ADR**

Not regulated as a hazardous material.

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**SECTION 15 - REGULATORY INFORMATION**

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**European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7446-20-0: 1

**United Kingdom Occupational Exposure Limits**

**United Kingdom Maximum Exposure Limits**

**Canada**

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 7446-20-0 is not listed on Canada's Ingredient Disclosure List.

**Exposure Limits****US FEDERAL****TSCA**

CAS# 7446-20-0 is not on the TSCA Inventory because it is a hydrate.

It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

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**SECTION 16 - ADDITIONAL INFORMATION**

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MSDS Creation Date: 12/27/1994 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.