

MATERIAL SAFETY DATA SHEET
Zinc sulfate monohydrate

Section 1 - Chemical Product and Company Identification

MSDS Name:	Zinc sulfate monohydrate
Catalog Numbers:	38980-0000, 38980-0010, 38980-0050, 38980-2500
Synonyms:	
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
7446-19-7	Zinc sulfate monohydrate		unlisted		

Text for R-phrases: see Section 16

Hazard Symbols: XN N



Risk Phrases: 22 41 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

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

Potential Health Effects

Eye:	Risk of serious damage to eyes.
Skin:	May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion:	Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation:	May cause respiratory tract irritation. May be harmful if inhaled.
Chronic:	

Section 4 - First Aid Measures

- Eyes:** 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:** Get medical aid. Wash mouth out with water.
- 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:

Section 5 - Fire Fighting Measures

- 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:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

- Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
- Storage:** Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 7446-19-7:

CAS# 7733-02-0:

Personal Protective Equipment

- Eyes:** Wear chemical splash goggles.
- Skin:** Wear appropriate protective gloves to prevent skin exposure.
- Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: colorless to white

Odor: odorless

pH: 4.0-5.2 (50 g/L aq.sol.)

Vapor Pressure: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: Not available

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature:

Solubility in water: 350 g/l (20°C)

Specific Gravity/Density:

Molecular Formula: O4SZn.H2O

Molecular Weight: 179.47

Section 10 - Stability and Reactivity

Chemical Stability:	Stable. Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid:	Incompatible materials, exposure to moist air or water.
Incompatibilities with Other Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Sulfur oxides (SOx), including sulfur oxide and sulfur dioxide, zinc oxides.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 7446-19-7: None listed CAS# 7733-02-0: ZH5260000
LD50/LC50:	RTECS: Not available. RTECS: CAS# 7733-02-0: Draize test, rabbit, eye: 420 ug Moderate; Oral, mouse: LD50 = 245 mg/kg; Oral, rabbit: LD50 = 2 gm/kg; .
Carcinogenicity:	Zinc sulfate monohydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Zinc sulfate anhydrous - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity:	Fish: Rainbow trout: LC50: 0.43 mg/L; 96H; anhydrous substance
Other:	Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class:	9	9	9
UN Number:	3077	3077	3077
Packing Group:	III	III	III

USA RQ: CAS# 7733-02-0: 1000 lb final RQ; 454 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.

R 41 Risk of serious damage to eyes.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 22 Do not breathe dust.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 39 Wear eye/face protection.

S 46 If swallowed, seek medical advice immediately and show this container or label.

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.

WGK (Water Danger/Protection)

CAS# 7446-19-7: Not available

CAS# 7733-02-0: 1

Canada

CAS# 7446-19-7 is listed on Canada's DSL List

CAS# 7733-02-0 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7446-19-7 is not listed on the TSCA Inventory. It is for research and development use only.

CAS# 7733-02-0 is listed on the TSCA Inventory.

Section 16 - Other Information

Text for R-phrases from Section 2

MSDS Creation Date: 7/17/2006

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 event 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.
