

Material Safety Data Sheet

Zinc sulfate

ACC# 89980

Section 1 - Chemical Product and Company Identification

MSDS Name: Zinc sulfate**Catalog Numbers:** 67001**Synonyms:** Sulfuric acid zinc salt (1:1) heptahydrate**Company Identification:**

Fisher Diagnostics

Fisher Scientific Company, LLC

8365 Valley Pike

Middletown, VA 22645-0307

For information, call: 800-524-0294**Emergency Number:** 800-524-0294**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7732-18-5	Water	50.0	231-791-2
7446-20-0	Zinc sulfate	35.0	unlisted
0-00-0	Inhibitor	<1.0	unlisted
90-43-7	Dowicide	<1.0	201-993-5

Hazard Symbols: None listed.**Risk Phrases:** None listed.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. **Caution!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: None.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation.**Ingestion:** May cause irritation of the digestive tract.**Inhalation:** May cause respiratory tract irritation.**Chronic:** No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

eyelids. Get medical aid immediately.

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 immediately.

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: Treat symptomatically and supportively.

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

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

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

Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Water	none listed	none listed	none listed
Zinc sulfate	none listed	none listed	none listed
Inhibitor	none listed	none listed	none listed
Dowicide	none listed	none listed	none listed

OSHA Vacated PELs: Water: No OSHA Vacated PELs are listed for this chemical. Zinc sulfate: No OSHA Vacated PELs are listed for this chemical. Inhibitor: No OSHA Vacated PELs are listed for this chemical. Dowicide: No OSHA Vacated PELs are listed for this chemical.

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 prevent skin exposure.

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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: odorless

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 100 deg C

Decomposition Temperature: Not available.

Solubility: Soluble in water

Specific Gravity/Density: 1.18

Molecular Formula: Not applicable.

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

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.

Section 11 - Toxicological Information

RTECS#:

CAS# 7732-18-5: ZC0110000

CAS# 7446-20-0: ZH5300000

CAS# 0-00-0 unlisted.

CAS# 90-43-7: DV5775000

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

CAS# 7446-20-0:

Oral, mouse: LD50 = 200 mg/kg;

Oral, rat: LD50 = 1260 mg/kg;

CAS# 0-00-0:

CAS# 90-43-7:

Draize test, rabbit, eye: 50 ug/24H Severe;

Draize test, rabbit, skin: 250 mg;

Draize test, rabbit, skin: 20 mg/24H Moderate;

Oral, mouse: LD50 = 1050 mg/kg;

Oral, rat: LD50 = 2 gm/kg;

Carcinogenicity:

CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7446-20-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 0-00-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 90-43-7:

California: carcinogen, initial date 8/4/00

IARC: IARC Group 3 - not classifiable

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Neurotoxicity: No data available.

Mutagenicity: No data available.

Other Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information found.

Environmental: No information reported.

Physical: No information found.

Other: No information found.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information available.
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 7732-18-5 is listed on the TSCA inventory.

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)).

CAS# 0-00-0 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 90-43-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 7446-20-0: acute. CAS # 90-43-7: acute.

Section 313

This material contains Zinc sulfate (listed as Zinc), 35 0%, (CAS# 7446-20-0) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373. This material contains Dowicide (CAS# 90-43-7, 1 0%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7446-20-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 0-00-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 90-43-7 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

WARNING: This product contains Dowicide, a chemical known to the state of California to cause cancer. California

No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

Risk Phrases:**Safety Phrases:**

S 22 Do not breathe dust.

S 25 Avoid contact with eyes.

WGK (Water Danger/Protection)

CAS# 7732-18-5: No information available.

CAS# 7446-20-0: 1

CAS# 0-00-0: No information available.

CAS# 90-43-7: 2

Canada - DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7446-20-0 is listed on Canada's DSL List.

CAS# 90-43-7 is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Not available.

Canadian Ingredient Disclosure List

CAS# 7446-20-0 is not listed on the Canadian Ingredient Disclosure List.

CAS# 90-43-7 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

CAS# 7446-20-0 (listed as zinc): OEL-ARAB Republic of Egypt: TWA 0.1 mg
/m3

Section 16 - Additional Information

MSDS Creation Date: 10/08/1998

Revision #2 Date: 3/18/2003

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 Fisher 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 Fisher has been advised of the possibility of such damages.