



J.T. Baker Inc.
222 Red School Lane
Phillipsburg, NJ 08865

24-Hour Emergency Telephone 908-859-2151
National Response Center 800-424-8802
Chemtrec 800-424-9300

National Response In Canada
CANUTEC 613-996-6666

Outside U.S. and Canada
Chemtrec 202-483-7616

MATERIAL SAFETY DATA SHEET

FICHE
SIGNALÉTIQUE

HOJAS DE DATOS
DE SEGURIDAD

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.
All non-emergency questions should be directed to Customer Service (1-800-JTBAKER) for assistance.

Z4560 -02

Effective: 03/09/92

Zinc Sulfate, 7-Hydrate

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J.T.BAKER INC., 222 Red School Lane, Phillipsburg, NJ 08865

SECTION I - PRODUCT IDENTIFICATION

Product Name: Zinc Sulfate, 7-Hydrate
Common Synonyms: N/A
Chemical Family: Zinc Compounds
Formula: $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$
Formula Wt.: 287.56
CAS No.: 7446-20-0
NIOSH/RTECS No.: ZH5300000
Product Use: Laboratory Reagent
Product Codes: 4384,5598,4382

PRECAUTIONARY LABELING

BAKER SAF-T-DATA* System

HEALTH	FLAMMABILITY	REACTIVITY	CONTACT
1	0	1	2
SLIGHT	NONE	SLIGHT	MODERATE

Laboratory Protective Equipment



GOGGLES



LAB COAT

U.S. Precautionary Labeling

WARNING!

CAUSES IRRITATION. HARMFUL IF SWALLOWED.

Avoid contact with eyes, skin, clothing. Keep in tightly closed container.
Wash thoroughly after handling.

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PRECAUTIONARY LABELING (CONTINUED)

International Labeling

Do not breathe dust.

SAF-T-DATA* Storage Color Code: Orange (general storage)

SECTION II - COMPONENTS

Component	CAS No.	Weight %	OSHA/PEL	ACGIH/TLV
Zinc Sulfate, 7-Hydrate	7446-20-0	99-100	N/E	N/E

SECTION III - PHYSICAL DATA

Boiling Point: N/A

Vapor Pressure (mmHg): N/A

Melting Point: 100°C (212°F)
(at 760 mm Hg)

Vapor Density (air=1): N/A

Specific Gravity: 1.97
(H₂O=1)

Evaporation Rate: N/A

Solubility(H₂O): Appreciable (>10%)

% Volatiles by Volume: 0
(21°C)

pH: N/A

Odor Threshold (ppm): N/A

Physical State: Solid

Coefficient Water/Oil Distribution: N/A

Appearance & Odor: Colorless crystalline powder. Odorless.



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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Closed Cup): N/A

Autoignition Temperature: N/A

Flammable Limits: Upper - N/A Lower - N/A

Fire Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

Special Fire-Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

Unusual Fire & Explosion Hazards

None identified.

Toxic Gases Produced

sulfur dioxide, zinc fumes

Explosion Data-Sensitivity to Mechanical Impact

None identified.

Explosion Data-Sensitivity to Static Discharge

None identified.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): Not Established

Short-Term Exposure Limit (STEL): Not Established

Permissible Exposure Limit (PEL): Not Established

Toxicity of Components

No information is available

Carcinogenicity: NTP: No IARC: No Z List: No OSHA Reg: No

Carcinogenicity

None identified.



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SECTION U - HEALTH HAZARD DATA (CONTINUED)

Reproductive Effects

None identified.

Effects of Overexposure

INHALATION: none identified
SKIN CONTACT: irritation
EYE CONTACT: irritation
SKIN ABSORPTION: none identified
INGESTION: gastrointestinal pain
CHRONIC EFFECTS: none identified

Target Organs

none identified

Medical Conditions Generally Aggravated by Exposure

none identified

Primary Routes of Entry

ingestion, skin contact, eye contact

Emergency and First Aid Procedures

INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, immediately induce vomiting.
INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
SKIN CONTACT: In case of contact, flush skin with water.
EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least 15 minutes.

SARA/TITLE III HAZARD CATEGORIES and LISTS

Acute: Yes Chronic: Yes Flammability: No Pressure: No Reactivity: No



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SECTION V - HEALTH HAZARD DATA (CONTINUED)

Extremely Hazardous Substance: No
CERCLA Hazardous Substance: Yes Contains Zinc (RQ = 1000 LBS)
SARA 313 Toxic Chemicals: Yes Contains Zinc
Generic Class: Generic Class Removed from CFR: 7/1/91
TSCA Inventory: Yes

SECTION VI - REACTIVITY DATA

Stability: Stable Hazardous Polymerization: Will not occur
Conditions to Avoid: heat, moisture
Incompatibles: water
Decomposition Products: oxides of sulfur, oxides of zinc

SECTION VII - SPILL & DISPOSAL PROCEDURES

Steps to be Taken in the Event of a Spill or Discharge

Wear self-contained breathing apparatus and full protective clothing. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.
Respiratory Protection: None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate respirator or dust mask.
Eye/Skin Protection: Safety goggles, rubber gloves are recommended.



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SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA* Storage Color Code: Orange (general storage)

Storage Requirements

Keep container tightly closed. Suitable for any general chemical storage area.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)

Proper Shipping Name: Hazardous substance, solid, n.o.s. (Zinc sulfate)
Hazard Class: ORM-E
UN/NA: NA9188 Reportable Quantity: 1000 LBS.
Labels: NONE
Regulatory References: 49CFR 172.101; 173.500; 173.510

International (I.M.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)
Marine Pollutants: No

AIR (I.C.A.O.)

Proper Shipping Name: Chemicals, n.o.s. (Non-regulated)

U.S. Customs Harmonization Number: 28332600009

N/A = Not Applicable or Not Available
N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This

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chemical may interact with other substances. Since the potential uses are so varied, Baker cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Baker warrants that the chemical meets the specifications set forth on the label.

BAKER DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Baker will periodically revise this Material Safety Data Sheet.

Note: CHEMTREC, CANUTEC, and NATIONAL RESPONSE CENTER emergency telephone numbers are to be used ONLY in the event of CHEMICAL EMERGENCIES involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to Customer Service (1-800-JTBAKER) for assistance.

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Approved by Quality Assurance Department.