

MSDS# 25470

Section 1 - Chemical Product and Company Identification

MSDS Name: Zinc Nitrate Hexahydrate
Catalog Numbers: S80248, S80248-1, S80248-3, S80248-2, Z45-500
Synonyms: Nitric Acid, Zinc Salt, Hexahydrate

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 10196-18-6
Chemical Name: Zinc Nitrate Hexahydrate
%: 100
EINECS#: unlisted

Hazard Symbols:

XN O



Risk Phrases:

22 36/38 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Strong oxidizer. Contact with other material may cause a fire. Hygroscopic (absorbs moisture from the air).
Harmful if swallowed. Causes eye and skin irritation. Target Organs: Eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.
Skin: Causes 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: 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.

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

Ingestion: Do not induce vomiting. 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 if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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. Strong oxidizer. Contact with other material may cause fire.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Not available

Lower:

Explosion Limits: Not available

Upper:

NFPA Rating: ; instability: OX

Section 6 - Accidental Release Measures

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

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Zinc Nitrate Hexahydrate	none listed	none listed	none listed

OSHA Vacated PELs: Zinc Nitrate Hexahydrate: None listed

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

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 gloves to prevent skin exposure.

Clothing: Wear a chemical apron. Wear appropriate clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Color: white

Odor: odorless

pH: 5.1 in 5% solution.

Vapor Pressure: Not available

Vapor Density: 10.3

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not applicable.

Freezing/Melting Point: 36.4 deg C (97.52°F)

Decomposition Temperature:

Solubility in water: Soluble in water.

Specific Gravity/Density: 2.065

Molecular Formula: Zn(NO3)2 .6H2O

Molecular Weight: 297.4702

Section 10 - Stability and Reactivity

Chemical Stability:

Hygroscopic: absorbs moisture or water from the air.

Conditions to Avoid:

Incompatible materials, dust generation, combustible materials, moist air.

Incompatibilities with Other Materials

Strong reducing agents.

Hazardous Decomposition Products

Nitrogen oxides.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 10196-18-6: ZH4775000

RTECS:

CAS# 10196-18-6: Draize test, rabbit, eye: 20 mg/24H Moderate;

LD50/LC50:

Draize test, rabbit, skin: 500 mg/24H Severe;

Oral, mouse: LD50 = 926 mg/kg;

Oral, rat: LD50 = 1190 mg/kg;

Carcinogenicity:

Zinc Nitrate Hexahydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:

Not available

Teratogenicity:

Not available

Reproductive:

Not available

Neurotoxicity:

Not available

Mutagenicity:

Not available

Other:

See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other:

Do not empty into drains.

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

Shipping Name: ZINC NITRATE

Hazard Class: 5.1

UN Number: UN1514

Packing Group: II

Canada TDG

Shipping Name: ZINC NITRATE

Hazard Class: 5.1

UN Number: UN1514

Packing Group: II

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 10196-18-6 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)).

Health & Safety Reporting List	None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules Section 12b	None of the chemicals in this product are under a Chemical Test Rule. 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.
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 # 10196-18-6: acute, flammable.
Section 313	This material contains Zinc Nitrate Hexahydrate (listed as Zinc compounds), 100%, (CAS# 10196-18-6) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
Clean Air Act:	This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.
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. CAS# 10196-18-6 is listed as a Toxic Pollutant under the Clean Water Act.
OSHA:	
STATE	Zinc Nitrate Hexahydrate can be found on the following state right to know lists: California, (listed as Zinc compounds), New Jersey, (listed as Zinc compounds), Pennsylvania, (listed as Zinc compounds).
California Prop 65	
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:	XN O
Risk Phrases:	
	R 22 Harmful if swallowed.
	R 36/38 Irritating to eyes and skin.
	R 8 Contact with combustible material may cause fire.
Safety Phrases:	
	S 17 Keep away from combustible material.
	S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)	
	CAS# 10196-18-6: 1
Canada	
Canadian WHMIS Classifications:	C, D1B, D2B
	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
	CAS# 10196-18-6 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: 8/21/1998

Revision #4 Date 5/23/2007

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.
