

**Section 1: Identification**

**Product Name** ZINC SULFATE USP (HEPTAHYDRATE)  
**Commercial Name** ZINC SULFATE HEPTAHYDRATE  
**Product Use** Active pharmaceutical substance. Food additive. Ingredient for cosmetics.  
**Restrictions On Use** N/A  
**Product Code** 30-5204  
**Company** PCCA  
 9901 South Wilcrest  
 Houston, TX 77099  
 Phone: 1-800-331-2498  
 Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

**Section 2: Hazard(s) Identification**

**OSHA Haz Com:** The substance is classified as dangerous. Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 (multiplying factor = 1) Aquatic Chronic 1, H410 (multiplying factor = 1)  
**CFR 1910.1200**

**Signal Word** DANGER

**Hazard Statement(s)** Harmful if swallowed. Causes serious eye damage. Very toxic to aquatic life with long lasting effects

**Pictogram(s) or Symbol(s)**



**Precautionary Statement(s):**

**Prevention** P264 Wash hands and exposed parts of the body thoroughly after handling. P273 Avoid release to the environment. P280 Wear eye protection.  
**Response** P305+ P351+ P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a doctor.  
**Storage** N/A  
**Disposal** P391 Collect spillage

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture** SUBSTANCE  
**Components** ZINC SULFATE (HYDROUS) (MONO-, HEXA-AND HEPTA HYDRATE)  
**% By Weight** 99-100  
**CAS#** 7446-20-0  
**Molecular Weight** N/A  
**Chemical Formula** N/A  
**Synonym(s)** ZINC SULFATE HEPTAHYDRATE

**Mixtures**

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
ZINC SULFATE HEPTAHYDRATE	7446-20-0	99-100	N/A	N/A

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.
<b>Skin Contact</b>	Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.
<b>Eye Contact</b>	Do not rub your eyes – it could lead to mechanical damage of the cornea. Rinse eyes immediately with a flow of running water, open the eyelids ( also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.
<b>Ingestion</b>	Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment
<b>Symptoms/Effects</b>	
<b>Acute</b>	If inhaled Inhaling dust can cause corrosion of the breathing system. If on skin Not expected. If in eyes Causes serious eye damage. If swallowed Corrosion of the digestion system can occur
<b>Delayed</b>	If inhaled Inhaling dust can cause corrosion of the breathing system. If on skin Not expected. If in eyes Causes serious eye damage. If swallowed Corrosion of the digestion system can occur
<b>Immediate Medical Attention</b>	Symptomatic treatment.

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Alcohol- resistant foam, carbon dioxide, powder, water spray jet, water mist.

**Unsuitable Extinguishing Media**

Water - full jet.

**Products of Combustion**

Inhalation of hazardous degradation ( pyrolysis) products may cause serious health damage. At high temperatures, decomposition occurs to form sulfur dioxide.

**Firefighters Special Equipment and Precautions**

Self- Contained Breathing Apparatus ( SCBA) with a chemical protection suit only where personal ( close) contact is likely. Use a self- contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

**Section 6: Accidental Release Measures**

Personal precautions, protective equipment and emergency procedures Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes. 6.2. Environmental precautions Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water. In the event of substantial pollution, contact respective authorities and wastewater treatment plants. 6.3. Methods and material for containment and cleaning up Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13. 6.4. Reference to other sections See the Section 7, 8 and 13.

**Section 7: Handling and Storage**

7.1. Precautions for safe handling Prevent contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment. 7.2. Conditions for safe storage, including any incompatibilities Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. 7.3. Specific end use( s) not available

**Section 8: Exposure Controls/Personal Protection**

**Exposure Limits** Not specified

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

**Engineering Controls**

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Provide showers and eye wash possibility.

**Personal Protection**

Eye/ face protection Protective goggles or face shield ( based on the nature of the work performed). Skin protection Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly. Respiratory protection Use a mask with anti-dust filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Thermal hazard Not available. Environmental exposure controls Observe usual measures for protection of the environment, see Section 6.2. Collect spillage

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	SOLID WHITE CRYSTALLINE POWDER		
<b>Odor</b>	WITHOUT FRAGRANCE		
<b>Odor Threshold</b>	N/A		
<b>Melting Point</b>	CANNOT BE DETERMINED	<b>pH</b>	4-6 (5% @ 20°C)
<b>Freezing Point</b>	N/A	<b>Vapor Pressure</b>	N/A
<b>Boiling Point/Range</b>	CANNOT BE DETERMINED	<b>Vapor Density</b>	N/A
<b>Decomposition temperature</b>	38°C	<b>Viscosity</b>	N/A
<b>Partition Coefficient: n-octanol/water</b>	N/A	<b>Evaporation Rate</b>	N/A
<b>Flash Point</b>	N/A	<b>Autoignition temperature</b>	N/A
<b>Flammability</b>	non-inflammable	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	N/A
		<b>Upper</b>	N/A
<b>Solubility(ies)</b>	IN WATER: 165.6G/100G 20°C		
<b>Other</b>	N/A		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	The substance is non-flammable.
<b>Chemical Stability</b>	The product is stable under normal conditions.
<b>Hazardous Polymerization</b>	N/A
<b>Conditions to Avoid</b>	The product is stable and no degradation occurs under normal use. Heat.
<b>Incompatible Materials</b>	N/A
<b>Hazardous Decomposition Products</b>	Not developed under normal uses. At high temperatures, irritating or toxic gases may be formed. Sulphur oxides

**Section 11: Toxicological Information**

**RTECS** N/A

**Acute Toxicity**

Harmful if swallowed. zinc sulphate ( hydrous) ( mono-, hexa- and hepta hydrate) Route of exposure Parameter Method Value  
 Exposure time Species Sex Oral LD OECD 401 926 mg/ kg bw Mouse M Dermal LD OECD 402 > 2000 mg/ kg bw 24 hour Rat F/  
 M

**Skin Corrosion/Irritation**

Based on available data the classification criteria are not met

**Serious Eye Damage/Irritation**

Causes serious eye damage.

**Respiratory or Skin Sensitization**

Based on available data the classification criteria are not met.

**Germ Cell Mutagenicity**

Based on available data the classification criteria are not met.

**Carcinogenicity**

Based on available data the classification criteria are not met.

**Reproductive Toxicity**

Based on available data the classification criteria are not met.

**Routes of Entry**

ORAL & DERMAL

**Symptoms Related to Exposure**

Based on available data the classification criteria are not met.

**Potential Health Effects**

Based on available data the classification criteria are not met.

**Target Organ(s)** The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission

**Section 12: Ecological Information****Ecotoxicity**

Very toxic to aquatic life with long lasting effects. zinc sulphate ( hydrous) ( mono-, hexa- and hepta hydrate) Parameter Value Exposure time Species Environment LC 330 µg/ l 96 hour Fishes ( Pimephales promelas)

**Persistence and Degradability**

Data not available

**Bioaccumulative Potential**

Not available.

**Mobility in Soil**

Not available.

**Other Adverse Effects**

Not available.

**Section 13: Disposal Considerations****Waste Disposal**

Hazard of environmental contamination; dispose of the waste in accordance with the local and/ or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal ( a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

**Disposal of Container**

deposited in a dump with appropriate classification.

**Other Considerations**

N/A

**Section 14: Transport Information****DOT Classification**

SECTION 14: Transport information 14.1. UN number or ID number UN 3077 14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ( Zinc Sulphate Heptahydrate) 14.3. Transport hazard class( es) 9 Miscellaneous dangerous substances and articles 14.4. Packing group III - substances presenting low danger 14.5. Environmental hazards not relevant 14.6. Special precautions for user Reference in the Sections 4 to 8. 14.7. Maritime transport in bulk according to IMO instruments not relevant Additional information Hazard identification No. 90 UN number 3077 Classification code M7 Safety signs 9+ hazardous for the environment Road transport - ADR Special provisions 274, 335, 375, 601 Limited quantities 5 kg Excepted quantities E1 Packaging Packing instructions P002, IBC08, LP02, R001 Special packing provisions PP12, B3 Mixed packing provisions MP10 Portable tanks and bulk containers Guidelines T1, BK1, BK2, BK3 Special provisions TP33 ADR tank Tank code SGAV, LGBV Vehicles for tank carriage AT Transport category 3 Tunnel restriction code (-) Special provision for packages V13 bulk VC1, VC2 loading, unloading and handling CV13 Railway transport - RID Special provisions 274, 335, 375, 601 Excepted quantities E1 Packaging Packing instructions P002, IBC08, LP02, R001 Special packing provisions PP12, B3 Mixed packing provisions MP10 Portable tanks and bulk containers Guidelines T1, BK1, BK2, BK3 Special provisions TP33 RID Tanks Tank code SGAV, LGBV Transport category 0 Special provision for packages W 13 bulk VC1, VC2 loading, unloading and handling CW 13 Air transport - ICAO/ IATA Packaging instructions for limited amount Y956 Packaging instructions passenger 956 Cargo packaging instructions 956 Marine transport - IMDG EmS ( emergency plan) F- A, S-F

**Section 15: Regulatory Information**

**Regulations**

Regulation ( EC) No. 1907/ 2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals ( REACH), establishing the European Chemicals Agency, amending Directive 1999/ 45/ EC and repealing Council Regulation ( EEC) No. 793/ 93 and Commission Regulation ( EC) No. 1488/ 94 as well as Council Directive 76/ 769/ EEC and Commission Directives 91/ 155/ EEC, 93/ 67/ EEC, 93/ 105/ EC and 2000/ 21/ EC, as amended. REGULATION ( EC) No. 1272/ 2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended.

**Other**

Chemical safety Report ( CSR) has been carried out for the substance.

**Section 16: Other Information**

N/A