



SAFETY DATA SHEET

Revision Date **16-Mar-2012**

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name ZINC SULFATE ACS REAGENT GRADE

Recommended Use For research use only
Registration Number No information available

1.1 Product Identifier

Catalog Number: 191452

Supplier: MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency Telephone Number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

1.2 Relevant identified uses of the substance or mixture and uses advised against

2. HAZARDS IDENTIFICATION

GHS - Classification

Acute Oral Toxicity	Category 4
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1

GHS Label elements, including precautionary statements

Physical Hazards None

Risk Code

R22 - Harmful if swallowed.

R41 - Risk of serious damage to eyes.

Risk Combination Phrases

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 - Wear eye/face protection.

S60 - This material and its container must be disposed of as hazardous waste.

S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

S29 - Do not empty into drains.

S35 - This material and its container must be disposed of in a safe way.

S57 - Use appropriate containment to avoid environmental contamination.



Signal Word

Warning

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

Dispose of contents/container to an approved incineration plant

P273 - Avoid release to the environment

P501 - Dispose of contents/container to an approved waste disposal plant

NFPA rating:

NFPA Health: 2

NFPA Flammability: 0

NFPA Reactivity: 0

NFPA Special Note: -

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Spills and Leaks

Collect spillage

Disposal

Dispose of contents of container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms:

Sulfuric Acid, Zinc Salt (1:1), Heptahydrate; White Vitriol; Zinc Vitriol

Formula:

ZnSO₄ • 7H₂O

Molecular weight:

287.5

Chemical Name	EC No.	CAS Number	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
ZINC SULFATE	-	7446-20-0	100	Xn; R22 Xi; R41 N; R50 R53	GHS05 GHS07 GHS09 (Dgr) H302 H318 H410 Aquatic Acute 1 (H400)	No data available

For the full text of the R phrases and H statements mentioned in this section, see Section 2

4. FIRST AID MEASURES

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General Advice	Immediate medical attention is not required. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediate medical attention is not required Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Skin Contact	If skin irritation persists, call a physician. Immediate medical attention is not required. Wash off immediately with plenty of water. If symptoms persist, call a physician.
Inhalation	Immediate medical attention is not required Move to fresh air.
Rinse mouth	Immediate medical attention is not required. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
Protection of First-aiders	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Main Symptoms No information available

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂). Water. Foam.

Standard procedure for chemical fires

Extinguishing media which must not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Use personal protective equipment. Wear self-contained breathing apparatus and protective suit..

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

See Section 12 for additional information.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Dam up. Soak up with inert absorbent material. Clean contaminated surface thoroughly.

6.4 Reference to other sections

See Section 12 for additional information

7. HANDLING AND STORAGE

Storage

ROOM TEMPERATURE

DESICCATE

7.1 Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed in a dry and well-ventilated place. Keep in a bunded area

7.3 Specific end uses

Exposure Scenario

No information available

Other Guidelines

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available

8.2 Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas..

Personal Protective Equipment

Eye Protection

Tightly fitting safety goggles

Skin and Body Protection

Dry moleskin gloves. Polyvinyl alcohol or nitrile-butyl rubber gloves.

Hand Protection

Protective gloves

Respiratory Protection

Effective dust mask.. No special protective equipment required..

Other Protective Equipment

Impervious clothing. Long sleeved clothing.

Environmental Exposure Controls

Do not allow material to contaminate ground water system.. Local authorities should be advised if significant spillages cannot be contained.. Prevent product from entering drains..

Hygiene Measures

General industrial hygiene practice.. When using, do not eat, drink or smoke.. Remove and wash contaminated clothing before re-use..

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical State No information available
Appearance and Odor: White.

Physical Property Data

pH Value No data available
Flash Point No information available
Autoignition Temperature No data available
Melting/Freezing Point 80°C/176°F
Boiling Point (°C) No information available.
Vapor Pressure No data available
Vapor Density No information available
Water Solubility No data available
Evaporation Rate No data available.
Flammability (solid, gas) No data available
Flammability Limits in Air
 upper flammability limit No data available
 lower flammability limit No data available
Density 1.957
Specific Gravity No data available.
Decomposition Temperature No data available
Viscosity, Kinematic No data available.
Viscosity, Dynamic No data available.
Explosive Properties No information available.
Oxidizing Properties No information available
VOC Content (%) No information available

9.2 Other Safety Information

Other Safety Information

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3

Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

None in particular

10.5 Incompatible Materials

None in particular

10.6 Hazardous Decomposition Products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	No information available.
Eye Irritation	Irritating to eyes. Risk of serious damage to eyes. May cause eye irritation with susceptible persons.
Skin Irritation	Irritating to skin.
Ingestion	Harmful if swallowed.

Acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ZINC SULFATE 7446-20-0	1260 mg/kg (Rat)		

Mutagenic Effects	Contains no ingredient listed as a mutagen.
Carcinogenic Effects	None known.
Reproductive Toxicity	None known
Developmental Toxicity	None known.
Aspiration hazard	None known

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persistence and degradability

No data is available on the product itself

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Clean container with water Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty remaining contents.

14. TRANSPORT INFORMATION

IMDG/IMO

Proper Shipping Name	Environmentally hazardous substances, n.o.s.
Hazard Class	9
UN/ID No	UN3077
Packing Group	III

ICAO

Hazard class	9
UNID No.	UN3077
Proper Shipping Name	Environmentally hazardous substances, n.o.s.
Packing Group	III

ICAO/IATA

Hazard Class	9
UN/ID No.	UN3077
Proper Shipping Name	Environmentally hazardous substances, n.o.s.
Packing Group	III
EGR Code	171

DOT

Proper shipping name	Environmentally hazard substances, n.o.s.
Hazard class	9
UN/ID No	UN3077
Packing Group	III
Reportable Quantity (RQ)	1000 lb (454 kg)

TDG

Proper Shipping Name	Environmentally hazardous substance, n.o.s.
Hazard Class	9
UN/ID No	UN3077
Packing Group	III

Canada - WHMIS: Classifications Uncontrolled

MEX

	Not regulated
Proper Shipping Name	Environmentally hazardous substances, n.o.s.
Hazard Class	9
UN/ID No	UN3077
Packaging Group	III

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	EINECS / ELINCS	DSL / NDSL	PICCS	ENCS	IECSC	AICS	KECL
ZINC SULFATE			Listed	Listed	Listed	Listed	Listed	

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances / EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippine Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

16. OTHER INFORMATION

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Material Safety Data Sheet

Key literature references and sources for data

www.ChemADVISOR.com/