

# Material Safety Data Sheet

## Zinc sulfate heptahydrate, p.a.

ACC# 96637

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Zinc sulfate heptahydrate, p.a.

**Catalog Numbers:** AC205980000, AC205980010, AC205982500

**Synonyms:**

**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01

**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7446-20-0	Zinc sulfate heptahydrate	100	unlisted

**Hazard Symbols:** XI

**Risk Phrases:** 36/38

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white solid. **Caution!** May cause adverse reproductive effects based upon animal studies. Causes eye and skin irritation. May cause respiratory and digestive tract irritation. Hygroscopic (absorbs moisture from the air).

**Target Organs:** None known.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. Low hazard for usual industrial handling.

**Inhalation:** May cause respiratory tract irritation. Low hazard for usual industrial handling.

**Chronic:** Not available. None

### 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. 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.

**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 if cough or other symptoms appear.

**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. Substance is noncombustible.

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

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** Not published.

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. 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
Zinc sulfate heptahydrate	none listed	none listed	none listed
Zinc sulfate anhydrous	none listed	none listed	none listed

**OSHA Vacated PELs:** Zinc sulfate heptahydrate: No OSHA Vacated PELs are listed for this chemical. Zinc sulfate anhydrous: 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:** Solid

**Appearance:** white

**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:** > 500 deg C

**Solubility:** 1g/0.6ml

**Specific Gravity/Density:** 1.9570g/cm<sup>3</sup>

**Molecular Formula:** O<sub>4</sub>SZn.7H<sub>2</sub>O

**Molecular Weight:** 287.53

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other Materials:** Not available.

**Hazardous Decomposition Products:** Oxides of sulfur, toxic fumes of zinc oxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

**CAS# 7446-20-0:** ZH5300000

**CAS# 7733-02-0:** ZH5260000

### LD50/LC50:

CAS# 7446-20-0:

Oral, mouse: LD50 = 200 mg/kg;

Oral, rat: LD50 = 1260 mg/kg;

CAS# 7733-02-0:

Draize test, rabbit, eye: 420 ug Moderate;

Oral, mouse: LD50 = 245 mg/kg;

Oral, rabbit: LD50 = 2 gm/kg;

### Carcinogenicity:

CAS# 7446-20-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. CAS# 7733-02-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** Experimental reproductive effects have been reported.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. Fish toxicity: LC50 (96 hr) cichlid 13 ppm. Lethal in fathead minnow at <10 mg/l as zinc (exp. unspecified)[The Dictionary of Substances and their Effects, 1992]

**Environmental:** No information available.

**Physical:** No information available.

**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
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

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# 7733-02-0 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

CAS# 7733-02-0: 1000 lb final RQ; 454 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 7446-20-0: acute.

#### Section 313

This material contains Zinc sulfate heptahydrate (listed as Zinc), 100%, (CAS# 7446-20-0) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373. This chemical is not at a high enough concentration to be reportable under Section 313.

#### 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:

CAS# 7733-02-0 is listed as a Hazardous Substance 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# 7446-20-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7733-02-0 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

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:

XI

#### Risk Phrases:

R 36/38 Irritating to eyes and skin.

#### Safety Phrases:

S 22 Do not breathe dust.

S 25 Avoid contact with eyes.

**WGK (Water Danger/Protection)**

CAS# 7446-20-0: 1

CAS# 7733-02-0: 1

**Canada - DSL/NDSL**

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

CAS# 7733-02-0 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

**Canadian Ingredient Disclosure List**

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

CAS# 7733-02-0 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:** 9/02/1997**Revision #3 Date:** 7/14/2003

*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.*