

MATERIAL SAFETY DATA SHEET  
Zinc chloride

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Zinc chloride

**Catalog Numbers:** 19684-0000, 19684-0010, 19894-0000, 19894-5000, 31817-0000, 31817-0100, 38013-0000, 38013-0050, 38013-0250, 42459-0000, 42459-2500, 42459-5000

**Synonyms:**

**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**Company Identification: (USA)** Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**For information in the US, call:** 800-ACROS-01

**For information in Europe, call:** +32 14 57 52 11

**Emergency Number, Europe:** +32 14 57 52 99

**Emergency Number US:** 201-796-7100

**CHEMTREC Phone Number, US:** 800-424-9300

**CHEMTREC Phone Number, Europe:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
7646-85-7	Zinc chloride	>97%	231-592-0

**Hazard Symbols:** C N



**Risk Phrases:** 22 34 50/53

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Harmful if swallowed. Causes burns. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

#### Potential Health Effects

**Eye:** Causes eye burns.

**Skin:** Causes skin burns.

**Ingestion:** Harmful if swallowed. Causes gastrointestinal tract burns.

**Inhalation:** Causes chemical burns to the respiratory tract.

**Chronic:**

## Section 4 - First Aid Measures

<b>Eyes:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
<b>Skin:</b>	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Do not induce vomiting. Get medical aid immediately.
<b>Inhalation:</b>	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
<b>Extinguishing Media:</b>	Use foam, dry chemical, or carbon dioxide.

## Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

<b>Handling:</b>	Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.
<b>Storage:</b>	Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

## Section 8 - Exposure Controls, Personal Protection

### 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

CAS# 7646-85-7:

United Kingdom, WEL - TWA: 1 mg/m<sup>3</sup> TWA (fume) United Kingdom, WEL - STEL: 2 mg/m<sup>3</sup> STEL (fume)  
United States OSHA: 1 mg/m<sup>3</sup> TWA (fume)  
Belgium - TWA: 1 mg/m<sup>3</sup> VLE (fumes) Belgium - STEL: 2 mg/m<sup>3</sup> VLE (fumes)  
France - VME: 1 mg/m<sup>3</sup> VME (fume)  
Malaysia: 1 mg/m<sup>3</sup> TWA (fume)  
Netherlands: 1 mg/m<sup>3</sup> MAC (smoke)  
Spain: 1 mg/m<sup>3</sup> VLA-ED (fume) Spain: 2 mg/m<sup>3</sup> VLA-EC (fume)

### Personal Protective Equipment

<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder  
**Color:** white to off-white  
**Odor:** odorless  
**pH:** 5 (100 g/L aq.sol.)  
**Vapor Pressure:** 1.3mbar @428 deg C  
**Viscosity:** Not available  
**Boiling Point:** 732 deg C @760mmHg ( 1,349.60°F)  
**Freezing/Melting Point:** 293 deg C ( 559.40°F)  
**Autoignition Temperature:** Not available  
**Flash Point:** Not available  
**Explosion Limits: Lower:** Not available  
**Explosion Limits: Upper:** Not available  
**Decomposition Temperature:** Not available  
**Solubility in water:** 432 g/100ml (25°C)  
**Specific Gravity/Density:**  
**Molecular Formula:** Cl<sub>2</sub>Zn  
**Molecular Weight:** 136.29

## Section 10 - Stability and Reactivity

**Chemical Stability:** Hygroscopic: absorbs moisture or water from the air.  
**Conditions to Avoid:** Incompatible materials, exposure to moist air or water.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Hydrogen chloride, carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:** CAS# 7646-85-7: ZH1400000  
**LD50/LC50:** RTECS:  
**CAS# 7646-85-7:** Oral, mouse: LD50 = 329 mg/kg;  
Oral, rat: LD50 = 350 mg/kg;  
.  
**Carcinogenicity:** Zinc chloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
**Other:** See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

**Ecotoxicity:** Daphnia: Daphnia: EC50: 0.33 mg/L; 48H; .  
**Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	ZINC CHLORIDE, ANHYDROUS	ZINC CHLORIDE, ANHYDROUS	ZINC CHLORIDE, ANHYDROUS
<b>Hazard Class:</b>	8	8	8

<b>UN Number:</b>	2331	2331	2331
<b>Packing Group:</b>	III	III	III

USA RQ: CAS# 7646-85-7: 1000 lb final RQ; 454 kg final RQ

Severe Marine Pollutant

**Section 15 - Regulatory Information**

**European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: C N

Risk Phrases:

R 22 Harmful if swallowed.

R 34 Causes burns.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

WGK (Water Danger/Protection)

CAS# 7646-85-7: 1

Canada

CAS# 7646-85-7 is listed on Canada's DSL List

**US Federal**

TSCA

CAS# 7646-85-7 is listed on the TSCA Inventory.

**Section 16 - Other Information**

**MSDS Creation Date:** 7/16/1996

**Revision #1 Date** 6/02/2005

**Revisions were made in Sections:** General revision.

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