

SAFETY DATA SHEET

ZINC CHLORIDE ANHYDROUS

mznc100

1. Identification of the substance/preparation and of the company/undertaking

Product name : ZINC CHLORIDE ANHYDROUS **Supplier** : Brenntag UK and Ireland
 Albion House
 Rawdon Park
 Green Lane
 Yeadon
 Leeds
 LS19 7XX

Chemical product name : ZINC CHLORIDE ANHYDROUS

Synonyms : ZINC CHLORIDE ANHYDROUS

EMERGENCY ONLY TELEPHONE NUMBER : (N.C.E.C. CULHAM) 01865 407333 **Telephone No.** : (0113) 3879200

Fax No. : (0113) 3879280

Formula : ZnCl₂ **Molecular Mass** : 136.3

2. Composition/information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) ZINC CHLORIDE ANHYDROUS	7646-85-7	100	231-592-0	C, N	R22, R34, R37, R50/53

* Occupational Exposure Limit(s), if available, are listed in Section 8

Composition : ASSAY % w/w 98% min
 CONTAINS 2.0%w/w max ZINC OXIDE AS ZnO

CAS No. : 7646-85-7

EINECS Number : 231-592-0

3. Hazards identification

Human health hazards : Harmful if swallowed.
 Causes burns.
 Irritating to respiratory system.

Environmental hazards : Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

4. First-aid measures

First-Aid measures

Inhalation : Remove from exposure. Obtain medical attention. Keep warm and at rest. If there is difficulty in breathing, give oxygen.

Ingestion : Do not induce vomiting. Keep warm and at rest. Obtain medical attention urgently.

Skin contact : Immediately flood the skin with large quantities of water, preferably under a shower. Remove contaminated clothing as washing proceeds. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.

Eye Contact : Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.

Effects and symptoms

Inhalation : Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Overexposure by inhalation may cause respiratory irritation.

Ingestion : May be fatal if swallowed. May cause burns to mouth, throat and stomach.

Skin contact : corrosive The amount of tissue damage depends upon length of contact. Skin contact can produce inflammation and blistering.

Eye Contact : Corrosive to eyes. Eye contact can result in corneal damage or blindness.

Aggravating conditions : Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

5. Fire-fighting measures

Extinguishing Media

- Suitable** : Not combustible. Select extinguishing agent appropriate to other materials involved. Keep containers and surroundings cool with water spray.
- Unusual fire/explosion Hazards** : This product may give rise to hazardous fumes in a fire.
- Hazardous thermal (de)composition products** : Fire or high temperature create: Chlorine, oxides of zinc.
- Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures

- Personal Precautions** : Wear appropriate protective clothing. Wear respiratory protection.
- Environmental precautions and cleanup methods** : Sweep up into suitable containers for recovery or disposal. Avoid creating a dust.
- : Try to prevent the material from entering drains or water courses. Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

7. Handling and storage

- Handling** : Use in well ventilated area. Avoid inhaling dust. Avoid contact with eyes, skin and clothing. Emergency shower and eye wash facilities should be readily available. Avoid creating a dust. Keep container tightly closed when not in use.
- Storage** : Storage area should be: dry, well ventilated. Avoid storing sacks in a large stack to prevent the product from caking. Suitable storage materials are:- polyethylene. Do not store in:- paper sacks.
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Workplace Exposure Limits</u>
1) ZINC CHLORIDE ANHYDROUS	EH40 (United Kingdom (UK)). STEL: 2 mg/m ³ MEL: 1 mg/m ³

Personal protective equipment

- Respiratory system** : Dust respirator.
- Skin and body** : Synthetic apron.
- Hands** : PVC or Neoprene gloves
- Eyes** : Splash goggles.

9. Physical and chemical properties

- Physical state** : Crystalline solid.
- Colour** : White.
- Odour** : Odourless.
- Boiling point** : 732
- Melting point** : 262
- Density** : 1700-1800.
- Vapour pressure** : 0.99mmHg 428°C
- Solubility** : Soluble in water.
- pH** : 5 at 10% solution.
- Flash point** : Not available.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to Avoid** : Avoid excess heat for prolonged periods of time.
- Materials to avoid** : Strong alkalis.
- Hazardous decomposition products** : Fire or high temperature create: Chlorine, oxides of zinc.

11. Toxicological information**Local effects**

- Skin irritation** : Hazardous in case of skin contact (corrosive).
Eye irritation : Hazardous in case of eye contact (corrosive). Contact with concentrated chemical may rapidly cause severe eye damage, possible loss of sight.

Acute toxicity : Oral LD50 (rat) 350mg/kg.

Chronic toxicity : Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction or dermatitis. Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

12. Ecological information

Persistence/degradability : Not readily biodegradable.

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

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Dispose of in accordance with all applicable local and national regulations.

Waste Classification : Not applicable.

14. Transport information**International transport regulations**

UN : UN number 2331
UN : Proper shipping name ZINC CHLORIDE, ANHYDROUS
UN : Class 8
UN : Packing group III
UN : Label



ADR/RID : Proper shipping name ZINC CHLORIDE, ANHYDROUS

ADR/RID : Class 8

ADR/RID : Hazard identification number 80

IMDG : Proper shipping name ZINC CHLORIDE, ANHYDROUS

IMDG : Packing group III

IMDG : Class 8

IATA : Proper shipping name ZINC CHLORIDE, ANHYDROUS

IATA : Packing group III

IATA : Class 8

15. Regulatory information**EU Regulations**

Hazard symbol(s) :

Classification : Corrosive, Dangerous for the environment

Risk Phrases : R22- Harmful if swallowed.
 R34- Causes burns.
 R37- Irritating to respiratory system.
 R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases : S1/2- Keep locked up and out of the reach of children.
 S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
 S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 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.

Contains : - ZINC CHLORIDE ANHYDROUS

Product Use : Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.
 - Consumer applications.

16. Other information

HISTORY

Date of printing : 06/04/2009.
Date of issue : 18/05/2006.
Date of previous issue : 23/04/2001.
Version : 2
Prepared by : Michael Hale / Alistair Hunter

Notice to Reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

CHANGES SINCE PREVIOUS VERSIONS:

Version 2: Classification changed, exposure limit added.