

SAFETY DATA SHEET ACCORDING TO 1907/2006/EC, 453/2010/EU, 2015/830/EU (REACH)

CARBOLOGY ZINC

Revised on / Version: 30/06/2019 / 0003
Replaces revision of / Version: 25/05/2017 / 0002

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Identifier**
Product Name : CARBOLOGY ZINC
Product description : Fertiliser
Product Type : Soluble Liquid
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Relevant uses: Fertiliser
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet**
Rolfes Agri (Pty) Ltd
288 Mundt Street
Waltloo
Pretoria
South Africa
Tel: +27(0)12 803 0145
Fax: +27(0)12 803 8418
- 1.4 Emergency telephone number**
National advisory body/Poison Centre
Telephone number : SOUTH AFRICA
Griffon Poison Information Centre
(24 Hour Poisoning Emergency Helpline)
+27(0)82 446 8946



SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) no 1272/2008:
 Acute toxicity, oral Category 4; H302
 Serious eye damage/eye irritation Category 2A; H319

- 2.2 Label elements**
CLP Regulation (EC) no 1272/2008:



Hazard pictogram(s) :
Signal word : Warning
Hazard statement(s) : H302 - Harmful if swallowed
 H319 - Causes serious eye irritation

Precautionary statement(s) :
 These precautionary statements are not prescribed by directive 1272/2008, as this product is not classified as hazardous under this directive.

P101 - If medical advice is needed, have product container or label at hand.
 P102 - Keep out of reach of children.
 P103 - Read label before use.
 P264 - Wash ... thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 P330 - Rinse mouth.
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P501 - Dispose of the contents/containers in accordance with the current legislation on waste treatment.

- 2.3 Other hazards**
Non Applicable

SECTION 3: Composition/information on ingredients

- 3.1 Substance:**
 Non-applicable
- 3.2 Mixture:**
Chemical description: Multi-Constituent Substance
Components:

Chemical Name:	Zinc Acetate Dihydrate
CAS:	5970-45-6
EC:	611-865-4
Concentration:	< 15 %

SECTION 4: First Aid Measures**4.1 Description of first aid measures**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Do not give mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Keep person at rest and warm. Treat symptomatically and supportively as and when required. Obtain medical advice if necessary.

By skin contact:

Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.

By eye contact:

Immediately flush eyes with lukewarm water or saline solution for at least 15 minutes, lifting lower and upper eyelids occasionally. Check for and remove any contact lenses after 5 minutes. Get medical attention if necessary.

By ingestion / aspiration:

Have victim rinse mouth thoroughly with water. Give water to dilute the material if victim is alert and not convulsing. Induce vomiting immediately as directed by medical personnel. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomits, rinse mouth and administer more water. Never give anything by mouth to an unconscious person. Qualified medical personnel should perform administration of oxygen. Seek medical advice if necessary.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:	None
Specific treatments:	Treat symptomatically.

SECTION 5: Firefighting measures**5.1 Fire Extinguishing Media****Suitable extinguishing media:**

Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media:

No information available.

5.2 Special hazards arising from the substance or mixture**Hazards from the substance or mixture:**

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products:

During fire, irritating and toxic gases will be released due to thermal decomposition or combustion. Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

5.3 Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing the task. Personal protection equipment must be used against potential contact with the spilt product (see section 8). Evacuate the area and keep out those who do not have protection

6.2 Environmental precautions:

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways or soil). Collect spillage

6.3 Methods and materials for containment and cleaning up

Absorb the spillage using sand, saw dust or inert absorbent and move it to a safe place. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

- A. Precautions for safe manipulation
Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.
- B. Technical recommendations for the prevention of fires and explosions
Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.
- C. Technical recommendations to prevent ergonomic and toxicological risks
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
- D. Technical recommendations to prevent environmental risks
It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

- A. Technical measures for storage
Minimum Temp.: 5 °C
Maximum Temp.: 30 °C
Maximum time: 36 Months
- B. General conditions for storage
Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

There are no occupational exposure limits for the substances contained in the product

8.2 Exposure controls

Appropriate engineering controls:

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Possible: safety glasses with side-shields

Skin protection

Hand protection:

Protective gloves against minor risks.

Body protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Soluble Concentrate (Liquid)
Colour	: Rust brown
Odour	: Pungent odour

Volatility:

Boiling point at atmospheric pressure : >100°C
 Vapour pressure at 20 °C : Non-applicable *
 Vapour pressure at 50 °C : Non-applicable *
 Evaporation rate at 20 °C : Non-applicable *

Product description:

Density at 20 °C : 1.27
 Relative density at 20 °C : Non-applicable *
 Dynamic viscosity at 20 °C : Non-applicable *
 Kinematic viscosity at 20 °C : Non-applicable *
 Kinematic viscosity at 40 °C : Non-applicable *
 pH : 4.5 -5.0
 Vapour density at 20 °C : Non-applicable *
 Partition coefficient n-octanol/water 20 °C : Non-applicable *
 Solubility in water at 20 °C : Soluble in water.
 Solubility properties : Non-applicable *
 Decomposition temperature : Non-applicable *
 Melting point/freezing point : Non-applicable *
 Explosive properties : No explosive properties
 Oxidising properties : Non-applicable *

Flammability:

Flash Point : Non-applicable *
 Auto ignition temperature : Non-applicable *
 Lower flammability limit : Non-applicable *
 Upper flammability limit : Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

9.2 Other information: No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity:

No data available. Product is stable under normal conditions of storage, handling and use.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Avoid excessive heat.	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.6 Hazardous decomposition products:

On heating / burning: release of toxic and corrosive gases / vapours.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

The experimental information related to the toxicological properties of the product itself is not available.

11.2 Dangerous health implications:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation.

A. Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.
- Corrosively/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

B. Inhalation (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.
- Corrosively/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

C. Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact.
- Contact with the eyes: Based on available data, the classification criteria are met. Refer to Section 2.

D. CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

E. Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

F. Specific target organ toxicity (STOT)-time exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

G. Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect.

H. Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

SECTION 12: Ecological information

The experimental information related to the eco-toxicological properties of the product itself is not available.

12.1 Toxicity:

Acute oral toxicity (LD50): 7950 mg/kg [Mouse].
Toxic to aquatic life.

12.2 Persistence and degradability:

In accordance with column 2 of REACH Annex VII, the ready biodegradability test does not need to be conducted as the substance is inorganic.

12.3 Bio accumulative potential: Not available.**12.4 Mobility in soil:** Not available.**12.5 Results of PBT and vPvB assessment:** Not available**12.6 Other adverse effects:** No information available.**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods:**Product****Methods of disposal:**

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste:

No information available.

Packaging**Methods of disposal:**

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	Land transport (ADR/RID)	Inland waterway transport (AND/ADNR)	Sea Transport (IMDG)	Air transport (ICAO-TI / IATA- DGR)
14.1 UN Number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-

14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No	No	No	no
14.6 Special precautions for user	No data available.	No data available.	No data available.	No data available.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	No data available.	No data available.	No data available.	No data available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable
 Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable
 Active substances not included in Annex I under Regulation (EU) No 528/2012: Non-applicable
 Regulation (EU) No 689/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc.): Non-applicable

Other legislation:

The product could be affected by provisional and national legislation.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

15.2 Chemical Safety Assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: Other information

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EU) N° 453/2010, Regulation (EC) N° 2015/830)

Texts of the legislative phrases mentioned in section 2:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Texts of the legislative phrases mentioned in section 3:

Non applicable

CLP Regulation (EC) n° 1272/2008 (refer to section 3):

Acute toxicity, oral Category 4; H302
 Serious eye damage/eye irritation Category 2A; H319

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
www.dguv.de/ifa/gestis-dnel
<http://eur-lex.europa.eu>

Relevant P-, H- and EUH-phrases (number and full text)

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

P264 - Wash ... thoroughly after handling.

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P330 - Rinse mouth.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of the contents/containers in accordance with the current legislation on waste treatment.

Abbreviations and acronyms:

ADR - European agreement concerning the international carriage of dangerous goods by road

IMDG - International maritime dangerous goods code

IATA - International Air Transport Association

ICAO - International Civil Aviation Organisation

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Notice to reader

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