



# SAFETY DATA SHEET (SDS)

(In accordance with GHS ST/SG/AC.10/30/Rev.7 and SANS ISO 110141)

## CARBO ZMC

Issue Date	07/2019
Revision Date	2024
SDS Nr.	BNBV2/CF015

### Section – 1 PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	: Carbo ZMC
<b>Product Code</b>	: B 7644
<b>Recommended use</b>	: Carbohydrate Chelated Foliar spray with added Zinc, Manganese, Copper and Boron
<b>Supplier</b>	: Metson Manufacturing CC P.O. Box 1005, Cresta, 2118 Gauteng, South Africa
<b>Emergency Telephone Number</b>	: 0861 Metson (638 766)

### Section 2 - HAZARDS IDENTIFICATION

Hazard Class	Hazard Category	Hazard Statement	Hazard Code	Signal Word
Flammable liquid and vapour	3	Flammable liquid	H226	Warning
Acute toxicity, oral	4	Harmful if swallowed	H302	Warning
Skin corrosion/irritation	1A, 1B, 1C	Causes severe skin burns and eye damage	H314	Danger
Reproductive toxicity	1A, 1B	May damage fertility; may damage the unborn child	H360FD	Danger
Hazardous to the environment, acute hazard	1	Very toxic to aquatic life	H400	Danger
Hazardous to the environment, long term hazard	1	Very toxic to aquatic life with long-lasting effects	H410	Danger



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### Section 3 – COMPOSITION / INFORMATION ON COMPONENTS

**Substance / preparation** : Preparation  
**Chemical nature** : A solution in water  
**Hazardous components** :

Chemical Name	CAS No.	Concentration
Zinc	7440-66-6	1-5%
Manganese	7439-96-5	1-5%
Copper	7440-50-8	0-2%
Boric Acid	10043-35-3	0-1%
Non-Disclosed Ingredients		87-98%

*Ingredients not identified are confidential or non-hazardous. Values on SDS are not product specifications.*

### Section 4 - FIRST AID MEASURES

**Eye Contact** : Wash with copious amount of water for about 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat rinse. Seek medical advice immediately.

**Skin Contact** : Remove all contaminated clothing while flushing the contaminated skin immediately with running water for a minimum of 15 minutes. If irritation persists, repeat rinse. Seek medical advice if required.

**Ingestion** : Seek immediate medical attention. Give ½ to one full glass of water to rinse the mouth with. Do not induce vomiting, unless under direction of a physician or a poison control centre expert. If spontaneous vomiting occurs, have the victim lean forward with the head down to avoid breathing in of vomit, rinse mouth and administer water. Transport the victim immediately to an emergency facility.

**Inhalation** : Move away from the vapors and into an area with adequate ventilation.

**Note to Physician** : None

### Section 5 - FIRE FIGHTING MEASURES

**Suitable extinguishing media** : For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires use foam or water-fog; avoid using water jet. Contain run-off with barriers, e.g. earth

**Special protective equipment** : Wear full protective clothing and NIOSH-approved self-contained breathing apparatus. Fire might produce irritating or poisonous vapours, mists or other combustion products.

**Specific hazards** : Flammable. Keep fire exposed containers cool by spraying with water. Container could explode when heated.



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### Section 6 - ACCIDENTAL RELEASE MEASURES

- Personal Precautions** : Avoid contact with eyes. Ventilate area of spill or leak.
- Environmental precautions** : Avoid run-off of material into water courses.
- Methods for cleaning up** : Small quantities – Collect spill and containerize.  
Wash spill area with water.  
Large quantities – Dispose waste according to the local regulations.

### Section 7 - HANDLING AND STORAGE

- Safe handling advice** : Prevent skin or eye contact. Avoid getting the product on you or in you.  
Wash hands after handling. Do not eat or drink while handling the product.
- Storage conditions** : Do not store with food, feed or other materials for human or animal consumption. Keep container tightly closed. Store below 37°C.

### Section 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

- Exposure limits** : None
- Personal protection equipment**
- Eye protection** : Eye contact with the material should be avoided. Safety glasses, goggles or faceshields required.  
Maintain eye wash fountain and quick drench facilities in work areas.
- Skin and body protection** : Gloves and protective clothing made from Viton or PVC should be used. Verify impermeability under normal usage conditions.
- Inhalation** : Respirator Mask or NIOSH approved air purifying mask – required under normal conditions
- Protective measures** : Required under normal conditions. If eye or skin contact can occur washing facility for eyes and skin must be available nearby.

### Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Liquid
- Colour** : Dark Brown liquid
- Odour** : Fruity.
- Initial boiling point** : 212°F (100°C)
- Flash point** : N/A
- pH** : 6.5 - 7.0
- Specific gravity** : 1.32 (20°C)
- Water solubility** : Completely soluble



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### Section 10 – STABILITY AND REACTIVITY

- Conditions to avoid** : None
- Materials to avoid** : Avoid contact with Lime Sulphur and Bordeaux mixture.
- Hazardous decomposition products** : Not known.
- Hazardous polymerization** : Will not occur.

### Section 11 - TOXICOLOGICAL INFORMATION

#### LD50 Acute oral

#### Eye irritant

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

#### Skin irritant

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

#### Carcinogen

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

#### Acute exposure symptoms

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

### Section 12 - ECOLOGICAL INFORMATION

#### Persistence / degradability

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

#### Ecotoxicity

- Arsenic pentoxide : Refer to risk statements in section 15
- Chromium trioxide : Refer to risk statements in section 15
- Cupric oxide : Refer to risk statements in section 15

### Section 13 – DISPOSAL CONSIDERATIONS

- Product** : Dispose according to the local regulations.
- Containers** : Dispose according to the local regulations.
- Contaminated packaging** : Dispose according to the local regulations.



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### Section 14 – TRANSPORT INFORMATION

Non - Dangerous

### Section 15 – REGULATORY INFORMATION

#### National legislation (South Africa)

**Transport** : National Road Traffic Act, Act 93 of 1996 – Chapter VII of the regulations.  
**Waste disposal** : National Water Act, Act 36 of 1998

#### Other regulations

**Hazard Symbols** : None

#### Risk phrases

: H226 – Flammable liquid  
: H302 – Harmful if swallowed  
: H314 – Causes severe skin burns and eye damage  
: H360FD – May damage fertility; may damage the unborn child  
: H400 – Very toxic to aquatic life  
: H410 – Very toxic to aquatic life with long lasting effects

**Safety phrases** : None

### Section 16 – OTHER INFORMATION

**16.1** This Safety Data Sheet has been prepared using data supplied by the manufacturers of the ingredients and summarizes our best knowledge, at the date of issue, and of the health and safety information of the product and how to safely handle and use the product in the workplace. Since Metson Manufacturing cannot anticipate or control the conditions under which the product may be used, each user must prior to usage, review this Safety Data Sheet in the context of how their user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that and appropriate risk assessment can be made, the user should contact Metson Manufacturing.

**16.2** **Original** : July 2019  
**Latest Revision** : July 2024

**019**  
**07/2019**  
**Future Revision 2025**

**End of SDS**

#### Key:

FKM : Fluoroelastomer  
PVC : Polyvinyl chloride  
NIOSH : National Institute for Occupational Health and Safety



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**Label elements**

GHS (Pictogram)	GHS (Classification)	Protective Clothing
	<p>H226 – Flammable liquid            H302 – Harmful if swallowed            H314 – Causes severe skin burns and eye damage            H360FD – May damage fertility; may damage the unborn child            H400 – Very toxic to aquatic life            H410 – Very toxic to aquatic life with long lasting effects</p>	



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