

Safety Data Sheet (SDS) CMO-C

According to ISO &SANS 11014:2010 & SANS 10234
Revision Date: 31 August 2017

First print date: June 2017

Version: 01.1

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: CMO-C

Additional information:

Relevant identification uses of the substance and uses advised against:

Identified uses: Water treatment.

Uses advised against: Do not mix with other water treatment products.

Details of the supplier of the Safety Data Sheet:

Arch Water Products South Africa (Pty) Ltd.

(Reg. No. 1972/014058/07)

P O Box 150, Kempton Park, 1620

Situated At: NCP Chloorkop Factory Site

Hytor Street

Chloorkop

Kempton Park, 1619

Emergency telephone numbers:

Poisons Information Centre: 0861 555 777 (24 hours)
+27 11 976 2115 (office hours only).

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The mixture is classified according to:

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]

Hazard classes/Hazard categories

Acute Toxicity oral (Category 4)
Skin Irritation (Category 2)
Skin Sensitization (Category 1)
Serious Eye Damage (Category 1)
Aquatic chronic 3

Hazard statement

H302
H315
H317
H318
H412

Safety Data Sheet (SDS) CMO-C

According to ISO &SANS 11014:2010 & SANS 10234
Revision Date: 31 August 2017

For full text of H-Statements see section 16

The most important adverse effects:

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Harmful if swallowed, causes skin irritation and may cause skin allergies. Causes serious eye damage.

Label elements:

Hazard pictograms:



Signal Words: DANGER

Hazard Statements: H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements: P260 Do not breathe dust. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special labelling of certain mixtures: None known.

Other hazards: Contains disodium tetraborate, decahydrate is considered to contain properties of concern.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC)	CAS-No.	Concentration % by weight	Classification EC1272/2008
	EC-No.		
Sodium molybdate	7631-95-0	50-100%	Not classified.
	231-551-7		
Sodium 4(or 5) – methyl-1H-benzotriazolide	64665-57-2	10-25%	Acute Toxicity oral (Category 4) H302. Skin Corrosion (Category 1B) H314. Aquatic Chronic 2 H411.
	265-004-9		
Hydroxyphosphonoacetic acid trisodium salt	78620-07-02	10-25%	Acute Toxicity oral (Category 4) H302. Skin sensitization (Category 1) H317.
Disodium tetraborate, decahydrate	1303-96-4	≤2.5%	Reproductive Toxicity (Category 1) specific conc. limit ≥8.5% H360FD. Eye Irritant (Category 2) H319.
	-		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES**Description of first aid measures:**

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of discomfort seek medical attention.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for 15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing. Seek medical attention immediately.

In case of ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: May cause irritation.

Ingestion: Harmful if swallowed.

Skin Contact: Skin irritation may occur or an allergic skin reaction.

Eye Contact: Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: CO₂, powder or water spray. Fight fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media: None known.

Special hazards arising from the mixture:

During heating or in case of fire poisonous gases are produced. Solid product, will melt and combustion may occur when exposed to fires.

Advice for fire-fighters:

Evacuate area and contact emergency services. Do not inhale explosive gases or combustion gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation, and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation, and contact with skin. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods for containment and cleaning up:

For small spills: Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

For large spills: Contain area to prevent spill from spreading. Minimize adverse effects on the environment. Sweep up and shovel, recover as much as possible of the pure product into appropriate containers. Later, determine if this recovered product can be used for its intended purpose.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None known.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Ensure good ventilation at the workplace. Prevent formation of dust. Avoid direct contact (skin/eye, ingestion and/or inhalation of fume/mist/dust) with the product. Safety showers and eye wash facilities should be available at the work area.

Protective measures: Observe directions on label and instructions for use. Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Store in original container prevent seepage into the ground. Keep container tightly closed in a dry and well-ventilated place. Store away from oxidising agents, do not store with acids. Store away from food stuffs. Protect from heat and direct sunlight.

Specific end uses:

Use only as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

The product does not contain relevant quantities of ingredients that require monitoring.

Occupational exposure limits:

Molybdenum compounds (Mo): OEL-REL TWA 5 mg/m³, STEL 10 mg/m³

Borax (B₄Na₂O₇·10H₂O), OEL-REL TWA 5 mg/m³

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Appropriate engineering controls: Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use tight fitting goggles.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Impervious protective clothing.

Respiratory protection: Not necessary if room is well ventilated. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: None required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Solid

Colour: Brown.

Odour: Mild.

Odour threshold: Not known.

pH: 7 (10 g/L).

Melting point/range (°C): Not known.

Boiling point/range (°C): Not known.

Flash point (°C): Not applicable.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): Not known.

Upper/lower flammability/explosive limits: Not known.

Vapour pressure (20°C): Not known.

Vapour density: Not known.

Specific gravity at 20°C: Not known.

Relative density (25°C): Not known.

Water solubility (g/l) at 20°C: Soluble.

n-Octanol/ Water partition coefficient: Not known.

Auto-ignition temperature: Product is not self-igniting.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (p Ka): Not known.

Oxidation-reduction potential: Not known.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

Product is not sensitive to mechanical shock or impact.

Chemical stability:

Stable under recommended conditions of storage. Product will not undergo hazardous polymerization.

Possibility of hazardous reactions:

Hazardous polymerization is not expected to occur.

Conditions to avoid:

Do not store next to heat source, in direct sunlight, or elevated storage temperature. Do not store where the daily average temperature exceeds 35°C / 95°F.

Incompatible materials:

Strong oxidizing agents and strong acids.

Hazardous decomposition products:

Phosphorous compounds, nitrogen oxides (NOx), carbon monoxide, carbon dioxide and boron compounds.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Results from *In Vitro* Membrane Barrier Test Method determined the product not corrosive to skin. (OECD TG 435)

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Borax ($B_4Na_2O_7 \cdot 10H_2O$) Harmonised classification for reprotoxicity: The substance is listed in Annex VI of CLP as: Repr. 1B # Suspected toxic for reproduction: Recommended for R category 1A or 1B by IMAP.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Harmful to fish.

Persistence and degradability:

Safety Data Sheet (SDS) CMO-C

According to ISO &SANS 11014:2010 & SANS 10234
Revision Date: 31 August 2017

Page 9 of 10

Lonza

The organic portion of the product is biodegradable.

Bioaccumulative potential:

Product is not expected to bioaccumulate.

Mobility in soil

No data available.

Results of PBT& vPvB assessment:

Not applicable.

Other adverse effects:

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Dispose of in accordance with municipal, provincial and national regulations.

Product/ packaging disposal:

Recycle where possible.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	No	No	No
Special precautions for user:	None	None	None
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No	No	No

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993
Regulation for Hazardous Chemical Substances.

Safety Data Sheet (SDS) CMO-C

According to ISO &SANS 11014:2010 & SANS 10234
Revision Date: 31 August 2017

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned.

Relevant classification and H statements (number and full text):

Aquatic chronic 2- Hazardous to the aquatic environment (Chronic 2).

Aquatic chronic 3- Hazardous to the aquatic environment (Chronic 3).

H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H360 May damage fertility or the unborn child. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Training instructions:

Use as instructed.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.