



German metal Surface treatment Chemicals Co.
Research and Development Department
Water treatment Division

MATERIAL SAFETY DATA SHEET

CMC 1010

MANUFACTURER:

German metal surface treatment (SUGEST)

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1. Product and Company Identification

NAME CMC 1010
USE used as corrosion inhibitor and scale inhibitor
LABEL CMC 1010
Company German metal surface treatment chemicals co.

2. Product Description

CMC 1010 is used as is a corrosion and scale inhibitor for protection of Water system, Closed Circuit Systems , potable water treatment systems and pipe-loop.

3. Hazards Identification

Emergency Overview

 Cause eye and skin irritation/or burn. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.

May cause an allergic skin reaction. Harmful or fatal if swallowed. Harmful if inhaled or absorbed through the skin.

PRIMARY ROUTES OF ENTRY: Eye contact, skin contact, ingestion, and inhalation of product mists TARGET

ORGANS: Eye, skin, respiratory system, liver, kidney, and central nervous system.

Potential Health Effects

HMIS: Health 2 Flammability 0 Reactivity 0 Personal Protection: E
 4 = extreme 3 = high 2 = moderate 1 = slight



- **Inhalation:** This product is not expected to present an inhalation hazard unless mists or vapors are generated. Exposure to vapors or mists may cause throat irritation, headache, nausea, vomiting, dizziness, drowsiness, central nervous system depression, pulmonary edema, involuntary eye movement, and/or coma.
- **Skin contact:** Contact with this product may cause skin irritation. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in the absorption of potentially lethal amounts of the product component
- **Eye contact:** Contact with this product may cause eye irritation.
- **Ingestion:** Harmful if swallowed, Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea. Kidney damage may be evidenced by changes in urine output, urine appearance, or edema (swelling from fluid retention).



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4. Chemical Composition

Ingredient	CAS No	Percent
Sodium silicate	1344-09-8	20 - 60
Metaphosphoric acid, hexasodium salt	10124-56-8	1 - 10
Water	7732 – 18 - 5	To 100

5. Physical and Chemical Properties

Appearance clear colorless to pale yellowish liquid

pH as it is at 25 °C 10 - 12

Density at 25 °C 1.2 ± 0.05 g/cm³

6. First Aid Measures

Inhalation:

Remove to fresh air. If breathing is difficult, have a trained medical person administer oxygen. Seek medical aid.

Skin contact:

Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Irritation persists seek immediate medical attention.

Eye contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and if irritation persists, seek immediate medical attention.

Ingestion:

Seek medical advice. DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

7. Fire Fighting Measures

Fire: Non flammable

Fire Extinguishing Media: Use dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Water spray may be used to extinguish surrounding fire and cool exposed containers. Water spray will also reduce fume and irritant gases.

Hazardous combustion products: In event of fire created carbon oxides may be formed.

8. Accidental Release Measures



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Use personal protection recommended in Section 10, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:

Prevent runoff from entering drains, sewers or waterways.

Clean-up methods:

Should be prevented from entering drains, eliminate all ignition sources. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and reclaim or dispose in sealed containers in licensed waste. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

9. Handling and Storage

Handling:

Before use carefully read the product label. Use of safe work practices are recommended to avoid eyes or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated area (eg. If container is damaged).

Storage:

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Removed from oxidizing agents, acids and foodstuffs. Ensure containers are adequately labeled and protected from physical damage when not in use.

Store separated from: Cyanides. Reducing Agents. Avoid contact with strong oxidizers. Strong acids.

Storage Conditions: Store in a cool, dry and good ventilated place. Keep container tightly closed after opening. Prevent direct sun light or ignition sources.

Temperature Limit: max 35 °C.

Maximum Storage Period: 24 Months under standard storage conditions.

Container Type Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001.

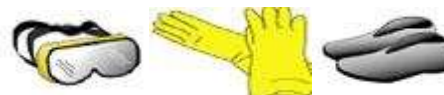
For information on product shelf life, please review labels on container.

10. Exposure Controls/Personal Protection

Exposure Limit Values:

OXY REL 8 hr TWA: 2 mg/m³ recommended Time Weighted Average - 8 hour (internal Occupational Exposure Limit)

Engineering controls:



Ventilation Requirements No special ventilation requirements General room ventilation is adequate.

Respiratory protection:

If airborne concentrations exceed published exposure limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).

Eye/face protection: Chemical splash goggles.

Skin protection: For prolonged or repeated handling, use protective gloves made of: Neoprene, nitrile, polyethylene or PVC. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

General Hygiene Considerations: Avoid direct contact with eyes and skin.

11. Stability and Reactivity

Stability: Stable under normal temperature conditions and recommended use.

Polymerization: Hazardous polymerization does not occur



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Materials to avoid: Strong acids. Strong oxidizing substances.

Conditions to avoid: (e.g., static discharge, shock, or vibration) -. Prolonged storage above 140 °F (60 °C)

12. Toxicological and Ecotoxicity information

ECOLOGICAL INFORMATION

SODIUM SILICATE:

TOXICITY DATA:

1.0-2.2 gm/kg oral-rat LD50

LOCAL EFFECTS: Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL: Moderately Toxic: ingestion

MEDICAL CONDITIONS AGGR

AVATED BY EXPOSURE: respiratory disorders, skin disorders and allergies

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE: May cause irritation of the respiratory tract, possibly with coughing, choking, and pain either immediately or more often within 72 hours.

CHRONIC EXPOSURE:

Depending on the concentration and duration of exposure, repeated or prolonged exposure may cause inflammatory changes in the nose, sinuses and bronchial regions.

SKIN CONTACT:

ACUTE EXPOSURE: Direct skin contact may cause irritation.

CHRONIC EXPOSURE: Repeated or prolonged contact may result in dermatitis.

EYE CONTACT: ACUTE EXPOSURE:

Direct contact may cause severe irritation, pain, and corneal burns (possibly leading to blindness). The full extent of the injury may not be immediately apparent.

CHRONIC EXPOSURE: Effects depend on concentration and duration of exposure. Repeated or prolonged contact may result in conjunctivitis, lens damage or other effects including blindness.

INGESTION:

ACUTE EXPOSURE:

May cause immediate pain and severe burns of the esophagus and gastrointestinal tract with vomiting, nausea and diarrhea. Edema of the epiglottis and shock may occur.

CHRONIC EXPOSURE:

Repeated or prolonged ingestion may result in chronic irritation and possible ulcers.

ECOTOXICITY DATA:

FISH TOXICITY:

This material has exhibited moderate toxicity to aquatic organisms.

FATE AND TRANSPORT:

BIODEGRADATION: This material is inorganic and not subject to biodegradation.

PERSISTENCE: This material is believed to persist in the environment.

BIOCONCENTRATION: This material is believed not to bioaccumulate.

OTHER ECOLOGICAL INFORMATION: This material has exhibited slight toxicity to terrestrial organisms.

13. Disposal Considerations

Disposal method:

Industrial setting: Disposal is according to all federal, state and local authorities for restrictions on disposal of chemical waste, manage chemical, waste through an approved waste treatment facility, do not reuse empty container in accordance with current local community codes please recycle empty container whenever possible.

14. Transport information

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information



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Land and Sea Transport

UN Number: NONE
Shipping Name CMC 1010
Packing Group: NONE

15. Other Information

STATE REGULATIONS

California Proposition 65:

This product and its ingredients are not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact CMC 1010 Customer Relations.

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

WHMIS - Classifications of Substances:

• D2B - Poisonous and Infectious Material; Materials causing other toxic effects - Toxic material

16. Packing

HDPE container and sealed cap

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