



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

MATERIAL SAFETY DATA SHEET

CMC 3042

MANUFACTURER:

German metal surface treatment (SUGEST)

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1. Product and Company Identification

NAME CMC 3042
USE used as scale and corrosion inhibitor
LABEL CMC 3042
Company German metal surface treatment chemicals co.

2. Product Description

CMC 3042 is a highly effective combined scale and corrosion inhibitor for open re-circulating water systems molybdate based blend for excellent multi-metal corrosion protection.

3. Hazards Identification

Emergency Overview

Potential Acute Health Effects:

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

Potential Health Effects

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

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.



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4. Chemical Composition

Ingredient	CAS No	Percent
Sodium molybdate	7631 – 95 - 0	10 - 30
Sodium hydroxide	1310 – 73 - 2	10 – 30
organophosphonates	2809-21-4	10 - 30
Synthetic polymers	Property	10 - 30
Water	7732 – 18 - 5	To 100

5. Physical and Chemical Properties

Appearance	Clear Colourless to pale yellowish liquid
Odour	Characteristic
pH at 25 °C	10 – 11
Density at 25 °C	1.2 ±0.05 gm/cm ³

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 Extinguishing Media: Use Water, carbon dioxide, foam or dry powder.

Hazardous combustion products: Thermal decomposition of this product produces irritating vapors and toxic gases (e.g. sulfur dioxide)

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.

RECOMMENDED STORAGE TEMPERATURE

Maximum: 38 C (100.4 F)

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

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 Guidelines

A: General Product Information

Sodium molybdate: 5 mg/m³ TWA

Molybdenum is rapidly excreted from the body. Persons exposed for long periods suffer from anemia.

Sodium hydroxide: 2 mg/m³ TWA

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

Chemical Stability

OP 07.3 F04 R1



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Product is normally stable.

Chemical Stability: Conditions to Avoid

Avoid strong alkali

Incompatibility

Oxidizing agents, strong reducing agents and alkali. Acidic solution will release chlorine when mixed with bleach.

Corrosive to aluminium, mild steel and many metals.

Hazardous Decomposition

Thermal decomposition products are toxic and may include Phosphines, CO and oxides of sodium.

Polymerization: Hazardous polymerization does not occur

12. Toxicological information

Acute and Chronic Toxicity

Not available. Refer to individual constituents.

Unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

SODIUM MOLYBDATE:

Not available. Refer to individual constituents.

SODIUM HYDROXIDE:

TOXICITY IRRITATION

Skin (rabbit): 500 mg/24h SEVERE

Eye (rabbit): 0.05 mg/24h SEVERE

Eye(rabbit):1mg/24h SEVERE

Eye(rabbit):1mg/30s rinsed- SEVERE

SODIUM TOLYLTRIAZOLE:

TOXICITY IRRITATION

Oral (rat) LD50: 675 mg/kg (female) Nil Reported

Oral (rat) LD50: 920 mg/kg (male)

Inhalation (rat) LC50: >17500 mg/m³/3h [CCINFO]

for 50%aqueous solution:

Oral (rat) LD50: 1980 mg/kg (male) Eye (rabbit): Corrosive

Oral (rat) LD50: 735 mg/kg (female) Skin (rabbit): Corrosive

Dermal (rabbit) LD50: >2000 mg/kg (24 hr)

ECOLOGICAL INFORMATION

Ecotoxicology:

Fish LC0 (96 h): Brachydanio rerio 100 mg/l

Fish LC50 (96 h): Brachydanio rerio ~122 mg/l,

Lepomis macrochirus >173 mg/l, Salmo gairdneri 25 mg/l

Inhibition bacteria:

Bacterial toxicity: Oxygen consumption test (Robra): No harmful effects on

Pseudomonas putida at 500 mg/l

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



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

International Transportation Regulations

Proper Shipping Name: CMC 3042

Hazard Class: 8

Packing Group: III

15. Other Information

POISONS SCHEDULE: S5

REGULATIONS

Sodium molybdate (CAS: 7631-95-0) is found on the following regulatory lists;

Australia Inventory of Chemical Substances (AICS)

OECD Representative List of High Production Volume (HPV) Chemicals

Sodium molybdate (CAS: 10102-40-6) is found on the following regulatory lists;

Australia Inventory of Chemical Substances (AICS)

OECD Representative List of High Production Volume (HPV) Chemicals

sodium hydroxide (CAS: 1310-73-2) is found on the following regulatory lists;

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia Poisons Schedule

International Council of Chemical Associations (ICCA) - High Production Volume List

OECD Representative List of High Production Volume (HPV) Chemicals

OECD Representative List of High Production Volume (HPV) Chemicals

16. Packing

HDPE container and sealed cap

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