

# Safety Data Sheet

acc. to OSHA HCS

Printing date 06/19/2023

Reviewed on 06/19/2023

## 1 Identification

- **Product identifier**
  - **Trade name:** MicroKote Copper Anti-Seize
    - **Part number:** 9166, 9167
    - **Application of the substance / the mixture**  
Lubricant
- **Details of the supplier of the safety data sheet**
  - **Supplier:**  
TIFCO Industries, Inc  
PO Box 40277  
Houston, TX 77240
  - Reno, NV 89515  
USA
  - Telephone: 800-868-4326
  - **Information department:** Product Safety Department
  - **Emergency telephone number:**  
United States: 1-800-424-9300  
International: +1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture** The product is not classified, according to the Globally Harmonized System (GHS).
- **Label elements**
  - **GHS label elements** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

## \* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
  - **Description:** Mixture of the substances listed below with nonhazardous additions.

### - Dangerous components:

CAS: 7440-50-8	copper		1 – 4%
CAS: 14808-60-7	Crystalline Silica	Carcinogenicity 1A, H350; Specific Target Organ Toxicity - Repeated Exposure 1, H372	≤ 1%

## 4 First-aid measures

- **Description of first aid measures**
  - **General information:** No special measures required.
  - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
  - **After skin contact:** Generally the product does not irritate the skin.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** If symptoms persist consult doctor.
  - **Information for doctor:**
    - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
    - **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.

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**- Advice for firefighters****- Protective equipment:**

- Wear self-contained respiratory protective device.
- Wear fully protective suit.

## 6 Accidental release measures

**- Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Wear protective clothing.

**- Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**- Methods and material for containment and cleaning up:** Dispose of the collected material according to regulations.**- 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 disposal information.

## 7 Handling and storage

**- Handling:****- Precautions for safe handling** No special measures required.**- Information about protection against explosions and fires:** No special measures required.**- Conditions for safe storage, including any incompatibilities****- Storage:****- Requirements to be met by storerooms and receptacles:** No special requirements.**- Information about storage in one common storage facility:** Not required.**- Further information about storage conditions:** None.**- Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

**- Additional information about design of technical systems:** No further data; see item 7.**- Control parameters****- Components with limit values that require monitoring at the workplace:****CAS: 7440-50-8 copper**

PEL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
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REL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
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TLV	Long-term value: 1* 0.2** mg/m <sup>3</sup> *dusts and mists; **fume; as Cu
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**CAS: 14808-60-7 Crystalline Silica**

PEL	Long-term value: 0.05* mg/m <sup>3</sup> *resp. dust; 30mg/m <sup>3</sup> /%SiO <sub>2</sub> +2
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REL	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
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TLV	Long-term value: 0.025* mg/m <sup>3</sup> *respirable particulate matter, A2
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**- Additional information:** The lists that were valid during the creation were used as basis.**- Exposure controls****- Personal protective equipment:****- General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

**- Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**- Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

**- Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**- Eye protection:** Not required.

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- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

<b>- Information on basic physical and chemical properties</b>	
<b>- General Information</b>	
<b>- Appearance:</b>	
- <b>Form:</b>	Pasty
- <b>Color:</b>	Bronze colored
- <b>Odor:</b>	Mild
- <b>Odor threshold:</b>	Not determined.
- <b>pH-value:</b>	Not applicable.
<b>- Change in condition</b>	
- <b>Melting point/Melting range:</b>	Undetermined.
- <b>Boiling point/Boiling range:</b>	Undetermined.
- <b>Flash point:</b>	215.5 °C (419.9 °F)
- <b>Flammability (solid, gaseous):</b>	Not determined.
- <b>Decomposition temperature:</b>	Not determined.
- <b>Auto igniting:</b>	Product is not selfigniting.
- <b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>- Explosion limits:</b>	
- <b>Lower:</b>	Not determined.
- <b>Upper:</b>	Not determined.
- <b>Vapor pressure:</b>	Not applicable.
- <b>Density at 20 °C (68 °F):</b>	≥ 7.83333 – ≤ 7.9 g/cm <sup>3</sup> (≥ 65.36914 – ≤ 65.9255 lbs/gal)
- <b>Relative density</b>	Not determined.
- <b>Vapor density</b>	Not applicable.
- <b>Evaporation rate</b>	Not applicable.
<b>- Solubility in / Miscibility with</b>	
- <b>Water:</b>	Insoluble.
- <b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>- Viscosity:</b>	
- <b>Dynamic at 20 °C (68 °F):</b>	100,000 mPas
- <b>Kinematic:</b>	Not applicable.
<b>- Solvent content:</b>	
- <b>VOC content:</b>	0.00 %
- <b>Solids content:</b>	100.0 %
- <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
    - **Primary irritant effect:**
      - **on the skin:** No irritant effect.
      - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.

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**- Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**- Carcinogenic categories****- IARC (International Agency for Research on Cancer)**

CAS: 14808-60-7	Crystalline Silica	1
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**- NTP (National Toxicology Program)**

CAS: 14808-60-7	Crystalline Silica	K
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**- OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information****- Toxicity****- Aquatic toxicity:** No further relevant information available.**- Persistence and degradability** No further relevant information available.**- Behavior in environmental systems:****- Bioaccumulative potential** No further relevant information available.**- Mobility in soil** No further relevant information available.**- Additional ecological information:****- General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**- Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.**- Other adverse effects** No further relevant information available.**13 Disposal considerations****- Waste treatment methods****- Recommendation:** Smaller quantities can be disposed of with household waste.**- Uncleaned packagings:****- Recommendation:** Disposal must be made according to official regulations.**14 Transport information****- UN-Number****- DOT, IMDG, IATA** UN3077**- UN proper shipping name****- DOT**

Environmentally hazardous substance, solid, n.o.s.

**- IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper), MARINE POLLUTANT

**- IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper)

**- Transport hazard class(es)****- DOT, IMDG, IATA****- Class**

9 Miscellaneous dangerous substances and articles

**- Label**

9

**- Packing group****- DOT, IMDG, IATA** III**- Environmental hazards:****- Marine pollutant:**

No

Yes (DOT)

Symbol (fish and tree)

**- Special marking (IATA):**

Symbol (fish and tree)

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<ul style="list-style-type: none"> <li>- <b>Special precautions for user</b></li> <li>- <b>Hazard identification number (Kemler code):</b></li> <li>- <b>EMS Number:</b></li> <li>- <b>Stowage Category</b></li> <li>- <b>Stowage Code</b></li> </ul>	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
<ul style="list-style-type: none"> <li>- <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	Not applicable.
<ul style="list-style-type: none"> <li>- <b>Transport/Additional information:</b></li> <li>- <b>DOT</b></li> <li>- <b>Quantity limitations</b></li> <li>- <b>Remarks:</b></li> </ul>	On passenger aircraft/rail: No limit On cargo aircraft only: No limit Special marking with the symbol (fish and tree).
<ul style="list-style-type: none"> <li>- <b>IMDG</b></li> <li>- <b>Limited quantities (LQ)</b></li> <li>- <b>Excepted quantities (EQ)</b></li> </ul>	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
<ul style="list-style-type: none"> <li>- <b>UN "Model Regulation":</b></li> </ul>	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER), 9, III

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 No further relevant information available.

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

CAS: 7440-50-8 | copper

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

CAS: 14808-60-7 | Crystalline Silica

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

CAS: 7440-50-8 | copper

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- **TLV (Threshold Limit Value)**

CAS: 14808-60-7 | Crystalline Silica

A2

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 14808-60-7 | Crystalline Silica

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** ND Industries, Inc. - Safety, Health and Environmental Affairs

- **Contact:** Safety, Health and Environmental Affairs

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**- Classification System:****- HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = *0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

**- NFPA ratings (scale 0 - 4)**

0	1	0	Health = 0
			Fire = 1
			Reactivity = 0

**- Date of preparation / last revision** 06/19/2023**- Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 IATA: International Air Transport Association  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 NIOSH: National Institute for Occupational Safety  
 OSHA: Occupational Safety & Health  
 TLV: Threshold Limit Value  
 PEL: Permissible Exposure Limit  
 REL: Recommended Exposure Limit  
 Carcinogenicity 1A: Carcinogenicity – Category 1A  
 Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1

**- \* Data compared to the previous version altered.****- Disclaimer**

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