SAFETY DATA SHEET
Solution 2000 Premium Copper Anti-Seize

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: L-12960

Product Name: Solution 2000 Premium Copper Anti-Seize

Company Name: MRO Solutions, LLC
5645 W. Howard St.
Niles, IL 60714

Phone Number: +1 (847)588-2480

Web site address: http://www.mrosolutions.com/

Emergency Contact: CHEMTREC +1 (800)424-9300

2. HAZARDS IDENTIFICATION

Specific Target Organ Toxicity (single exposure), Category 3
Specific Target Organ Toxicity (repeated exposure), Category 1

GHS Signal Word: **Danger**

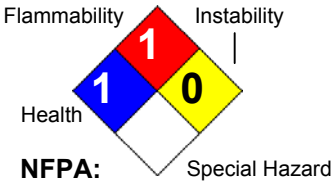
GHS Hazard Phrases:
H335 - May cause respiratory irritation.
H372 - Causes damage to organs (lungs) through prolonged or repeated exposure.

GHS Precaution Phrases:
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection.

GHS Response Phrases:
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314 - Get medical attention/advice if you feel unwell.
P308+313 - IF exposed or concerned: Get medical attention/advice.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

GHS Storage and Disposal Phrases:
P403+233 - Store container tightly closed in well-ventilated place. P501 - Dispose of contents and containers in accordance with local, regional, national, and international regulations.

Hazard Rating System:



NFPA:

Potential Health Effects (Acute and Chronic):
Preexisting pulmonary and dermatological disorders may be aggravated by exposure to hazardous components. Repeated or prolonged inhalation of graphite or carbon dusts may cause pulmonary fibrosis, emphysema, and pneumoconiosis. The severity of these effects is greatly influenced by the presence of other harmful mineral dusts, most notably crystalline silica. This product contains encapsulated metal powder containing copper and zinc and encapsulated silica. No exposure to free metal powder or free, respirable silica is anticipated during normal use of this product. Inhalation of free, respirable silica may cause silicosis or other serious delayed lung injury. Metal powder and/or silica may be released by grinding or machining of cured compound or coated materials. Repeated or prolonged exposure to metal dust may cause metal-fume fever, metallic taste, and discoloration of the skin and hair. Use NIOSH-approved dust/mist respirator when grinding or machining coated items.

Inhalation:
May cause irritation to the respiratory tract. Inhalation of dusts at levels above

recommended exposure limits may cause a metallic or sweet taste.

Skin Contact: May cause mild skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis.

Eye Contact: Dust may cause mechanical irritation. May cause tearing, redness, and swelling. May result in corneal injury.

Ingestion: No hazard expected in normal industrial use. May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
64742-52-5	Aliphatic petroleum distillate	60.0 %
7782-42-5	Graphite	17.0 %
112945-52-5	Silica, amorphous treated	1.00 %
7440-50-8	Copper	21.0 %

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get medical aid.

In Case of Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Gently wash with plenty of soap and water. Get medical attention if irritation persists. Wash contaminated clothing separately before reuse.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do after 5 minutes and continue rinsing for an additional 15 minutes. Get medical aid.

In Case of Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Call a poison control center.

Signs and Symptoms Of Exposure: Symptoms may not be readily apparent. Get medical advice/attention.

Note to Physician: Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt: 325 F (163 C) Method Used: Cleveland Open Cup

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. If water is used, fog nozzles are preferred.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode in the heat of a fire. Use water spray to keep fire-exposed containers cool.

Flammable Properties and Hazards: High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures: Use proper personal protective equipment as indicated in Section 8.

Environmental Precautions: Do not empty into drains. Material that cannot be recovered or reused should be disposed of in accordance with all Federal, State and Local regulations.

Steps To Be Taken In Case Material Is Released Or Spilled: Spills/Leaks: Provide ventilation. Avoid breathing vapors, mist or gas. Remove all sources of ignition. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation.

Do not reuse empty containers without first having them commercially cleaned or reconditioned. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

Precautions To Be Taken in Storing: Store in a cool, dry, well-ventilated area away from incompatible substances. Store away from heat. Store in a tightly closed container. Keep container closed when not in use.

Other Precautions: Keep out of reach of children. Handle in accordance with good industrial hygiene and safety practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
64742-52-5	Aliphatic petroleum distillate	No data.	No data.	No data.
7782-42-5	Graphite	PEL: 532.5 ppm/15 mppcf	TLV: 2 mg/m3 (resp. except fibers)	No data.
112945-52-5	Silica, amorphous treated	No data.	No data.	No data.
7440-50-8	Copper	PEL: 0.1 (fume)/ 1.0 (dust)	TLV: 0.2 mg/m3 (fume) 1 mg/m3(dust/mist)	No data.

Respiratory Equipment (Specify Type): Not required under normal use conditions. Avoid breathing vapors or dusts. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. Self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

Eye Protection: Safety glasses, chemical goggles, and/or face shield should be worn.

Protective Gloves: Not required under normal use conditions. Solvent resistant gloves required for prolonged or repeated contact.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure. Chemical resistant apron.

Engineering Controls (Ventilation etc.): Use adequate general or local exhaust ventilation to minimize exposure levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Work/Hygienic/Maintenance Practices: General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[ ] Gas [ ] Liquid [X] Solid
Appearance and Odor:	Appearance: Copper-colored. Paste. Odor: Slight. Petroleum-like.
Melting Point:	NA
Boiling Point:	500 F (260 C)
Autoignition Pt:	No data.
Flash Pt:	325 F (163 C) Method Used: Cleveland Open Cup
Explosive Limits:	LEL: No data. UEL: No data.
Specific Gravity (Water = 1):	1.24
Density:	NA
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	Heavier than air
Evaporation Rate:	Slower than ether
Solubility in Water:	Nil
Percent Volatile:	No data.

10. STABILITY AND REACTIVITY

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	High temperatures, Incompatible materials.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, Strong acids, Strong bases, nitrates, nitrite, chlorinated hydrocarbons, magnesium, chlorides. diborane. palladium. selenium. manganese. potassium chlorate. sodium carbonate. sulfates.
Hazardous Decomposition or Byproducts:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.
Other Studies: CAS # 112945-52-5:
Acute toxicity, LD50, Oral, Rat, 3160 mg / kg.
Other Studies: CAS# 7440-50-8:
Acute toxicity, LD50, Oral, Mouse, 413 mg / kg.
Other Studies: CAS# 64742-52-5:
Acute toxicity, LD, Oral, Rat, > 5.0 mg/kg

Irritation or Corrosion:

Other Studies: CAS# 64742-52-5:
Standard Draize Test, Skin, Species: Rabbit, 500.0 mg.

Carcinogenicity/Other Information:

This product contains encapsulated silicon dioxide (quartz, silica). No exposure to free, respirable silica is anticipated during normal use of this product. Free, respirable silica has been listed as a confirmed human carcinogen by NTP and IARC. Inhalation of free,

respirable silica may cause silicosis or other serious delayed lung injury. Silica may be released by grinding or machining of coated materials. Use NIOSH-approved dust/mist respirator when grinding or machining coated items.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:
Environmental: No information available.
Physical: No information available.
Other Studies: CAS# 7440-50-8:
LC50, Striped Bass (Morone saxatilis), larvae, 24 ug/L, 96H
LC50, Water flea (Daphnia lumholtzi), 9.4 ug/L, 96H.

Results of PBT and vPvB assessment: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as a hazardous material.
DOT Hazard Class:
UN/NA Number:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64742-52-5	Aliphatic petroleum distillate	No	No	No
7782-42-5	Graphite	No	No	No
112945-52-5	Silica, amorphous treated	No	No	No
7440-50-8	Copper	No	Yes 5000 LB	Yes-Cat. N100

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
64742-52-5	Aliphatic petroleum distillate	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
7782-42-5	Graphite	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 3325; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: Yes

112945-52-5	Silica, amorphous treated	TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
7440-50-8	Copper	TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: CMR, Part 5; NC TAP: No; NJ EHS: Yes - 0528; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: No; WI Air: Yes

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
64742-52-5	Aliphatic petroleum distillate	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes
7782-42-5	Graphite	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes
112945-52-5	Silica, amorphous treated	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes
7440-50-8	Copper	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes

16. OTHER INFORMATION

Revision Date: 05/14/2015

Preparer Name: Crystal Maira

Additional Information: No data available.

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