

ADHESIVE



ULTRA SHIELD ANTI SEIZE

Copper and Graphite Based Anti-Seize Compound

Safety Data Sheet

SECTION 1-PRODUCT AND COMPANY IDENTIFICATION

Manufacturer / Supplier: Adhesive R & D Inc.
4603 Anderson Drive
Eau Claire, WI. 54703
Phone : 715-832-4557

Product Use: Anti-Seize Compound
Restriction on Use: None known

SDS Date of Preparation: June 1, 2015

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification (Hazcom 2012):

Not Hazardous

Label Elements:

Not hazardous in accordance with the OSHA Hazard Communication Standard (29CFR 1910.1200).

Hazard Phrases:

None

Precautionary Phrases:

None

Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	20-40
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	20-40
Copper	7440-50-8	20-35
Graphite	7782-42-5	10-20

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Eye: Flush eyes with water, holding the eyelids apart. Get medical attention if irritation develops or persists.

Skin: Wash thoroughly with plenty of water. Get medical attention if irritation persists.

Inhalation: Remove to fresh air and keep comfortable for breathing. If irritation occurs, get medical attention.

Ingestion: If large amounts ingested, seek medical attention.

Most Important symptoms and effects, both acute and delayed: None known.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention generally not required.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media: Use water spray or fog, foam, carbon dioxide or dry chemical.

Special Hazards Arising from the Chemical: This compound will not burn unless it is pre-heated. Water fog may be used to cool the containers but do not spray directly into large containers of burning liquids as frothing may occur. Dense smoke and noxious or toxic fumes may be generated in a fire. Thermal decomposition may yield oxides of carbon.

Special Equipment and Precautions for Fire-Fighters: Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate personal protective equipment. Use caution: slip hazard.

Environmental Hazards: Report spills and releases as required to appropriate authorities.

Methods and Material for Containment and Cleaning Up: Collect spill with an inert absorbent material and place into a suitable container for disposal. Clean area thoroughly.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged skin contact Do not transfer to unlabeled containers.

Conditions for Safe Storage, Including any Incompatibilities: Store away from extreme heat and open flames. Store away from oxidizers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m ³ TWA ACGIH TLV (inhalable) 5 mg/m ³ TWA OSHA PEL
Distillates (petroleum), solvent-dewaxed heavy paraffinic	5 mg/m ³ TWA ACGIH TLV (inhalable) 5 mg/m ³ TWA OSHA PEL
Copper	1 mg/m ³ TWA ACGIH TLV 1 mg/m ³ TWA OSHA PEL
Graphite	2 mg/m ³ TWA ACGIH TLV (respirable) 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the exposure limits. If the product is used at high temperatures, local exhaust ventilation may be required.

Individual Protection Measures:

Respiratory Protection: In operations where the occupational exposure limits are exceeded or if use at elevated temperature where smoke is produced, a NIOSH approved respirator with organic vapor/particulate cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good

industrial hygiene practice.

Skin Protection: Impervious gloves such as rubber or nitrile recommended where needed to avoid prolonged skin contact.

Eye Protection: Safety glasses or goggles recommended where needed to avoid eye contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Copper colored paste	Vapor Density (air = 1): Not available
Odor: Mild petroleum odor	Specific Gravity: 1.2
Odor Threshold: Not established	Water Solubility: Not soluble
pH: Not available	Octanol/Water Partition Coefficient: Not available
Melting Point/Freezing Point: Not available	Autoignition Temperature: Not available
Boiling Point: Not available	Decomposition Temperature: Not available
Flash Point: >350°F	Viscosity: Not available
Evaporation Rate: Not available	Explosion Properties: None
Flammable Limits: LEL: Not established UEL: Not established	Oxidizing Properties: Not oxidizing
Vapor Pressure: Not established	Aerosol Fire Protection Level: Not applicable
VOC Content: <0.2%	Flammability (solid, gas): Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known

Conditions to Avoid: Use with strong oxidizing chemicals such as concentrated acids.

Incompatible Materials: Avoid strong oxidizing agents and acids.

Hazardous Decomposition Products: Thermal decomposition products may yield oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: May cause mild irritation.

Skin: Prolonged contact may cause irritation and drying of the skin.

Inhalation: No adverse effects expected at ambient temperatures. Inhalation of vapors and fumes from thermal decomposition may cause respiratory irritation and metal fume fever with symptoms of fever and chills.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea.

Chronic Hazards: Prolonged inhalation of thermal decomposition products may result in lung damage.

Carcinogen Status: None of the components of this product are listed as carcinogens by IARC, NTP or OSHA.

Acute Toxicity Values:

Distillates (petroleum), hydrotreated heavy naphthenic: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50: 2.18 mg/L, dermal rabbit LD50 > 2000 mg/kg

Distillates (petroleum), solvent-dewaxed heavy paraffinic: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50: 2.18 mg/L, dermal rabbit LD50 > 2000 mg/kg

Copper: Oral rat LD50 > 2500 mg/kg, inhalation rat LC50 > 5.11 mg/L, dermal rat LD50 > 2000 mg/kg

Graphite: Oral rat LD50 > 2000 mg/kg, inhalation rat LC50 > 2 mg/L

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Distillates (petroleum), hydrotreated heavy naphthenic: Pimephales promelas LL50 > 100 mg/L/96hr.

Distillates (petroleum), solvent-dewaxed heavy paraffinic: Pimephales promelas LL50 > 100 mg/L

Copper: Salmo gairdneri LC50: 190 ug/L/96hr. Copper is classified as toxic to aquatic organisms.

Graphite: Danio rerio LC50 > 100 mg/L/96hr

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, regional and national regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: Not regulated

DOT Technical Name: None

DOT Hazard Class: None

UN Number: None

DOT Labels Required (49CFR172.101): None

IMDG Shipping Description: Environmentally Hazardous Substance, solid, n.o.s. (contains copper)

ID Number: UN3077

Hazard Class: 9

Packing Group: III

Labels Required: Class 9

Marking Required: Environmentally Hazardous Substance, solid, n.o.s. (contains copper), UN3077

Placards Required: None if shipped as Limited Quantity

Note: This product can be shipped as a limited quantity in inner packages of <5 kg with a package max of 30 kg.

ICAO/IATA

Shipping Description: Environmentally Hazardous Substance, solid, n.o.s. (contains copper)

ID Number: UN3077

Hazard Class: 9

Packing Group: III

Labels Required: Class 9

SECTION 15: REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product has a Reportable Quantity (RQ) of 14,285 lbs. (based on the RQ for Copper of 5,000 lbs present at 20-35%). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Not Hazardous

SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:
Copper, 20-30%

EPA TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: This product is not known to contain listed chemicals.

SECTION 16: OTHER INFORMATION

Revision Summary: New format to comply with OSHA Hazcom 2012

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.