

1 Identification

- **Product identifier**
- **Trade name:** *Anti-Seize Compound*
- **Relevant identified uses of the substance or mixture.** *Additive*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Adhesive Systems, Inc.
A Division of Royal Adhesives & Sealants, LLC
9411 Corsair Road
Frankfort, Illinois 60423
Phone Number: 800-552-0299*
- **Information department:** *Environment protection department.*
- **Emergency telephone number:**
*ChemTrec: Day or Night within USA and Canada: 1-800-424-9300.
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)*

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product does not meet the criteria for classification as hazardous under the GHS and 29 CFR 1910.1200
- **Label elements**
- **GHS label elements** *Void*
- **Hazard pictograms** *Void*
- **Signal word** *Void*
- **Hazard statements** *Void*
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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

HEALTH	1	Health = 1
FIRE	1	Fire = 1
PHYSICAL HAZARD	0	Physical Hazard = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition/information on ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture*

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· Hazardous components:

7440-50-8	copper	25-50%
7782-42-5	Graphite	5-20%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Overexposure, remove to fresh air and seek medical attention.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Seek medical treatment.
- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
- **Protective equipment:** Protective clothing and respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste in accordance with federal state and local regulations.
Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent
- **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**
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.

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- Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep container closed when not in use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location away from direct heat.
- **Information about storage in one common storage facility:**
 - Store away from oxidizing agents.
 - Keep away from open flames and high temperatures.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:**

7440-50-8 copper

PEL Long-term value: 1* 0.1** mg/m³
as Cu *dusts and mists **fume

REL Long-term value: 1* 0.1** mg/m³
as Cu *dusts and mists **fume

TLV Long-term value: 1* 0.2** mg/m³
*dusts and mists; **fume; as Cu

7782-42-5 Graphite

PEL Long-term value: 15 mppcf* mg/m³
*impinger samples counted by light field techn.

REL Long-term value: 2.5* mg/m³
*respirable dust

TLV Long-term value: 2* mg/m³
all forms except graphite fibers; *resp. fraction

· **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
- **Personal protective equipment (see listings below)**
- **General protective and hygienic measures:**
 - The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

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- **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:** Safety glasses with side shields.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Paste
Color:	Copper colored
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point: Undetermined.

· **Boiling point:** >177 °C (>351 °F)

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Flammable limits:**

Lower:	Not determined
Upper:	Not determined

· **Vapor pressure:** Not applicable.

· **Specific gravity at 20 °C (68 °F):** 1.2 g/cm³ (10.014 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

Water: Insoluble

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· **Solvent content:**

Organic solvents: 0.0 %

Solids content: Not available

· **Other information** VOC content: <0.2%

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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** Exposure to high temperatures.
- **Incompatible materials:**
 - Reacts with oxidizing agents.
 - Reacts with acids.
- **Hazardous decomposition products:**
 - Carbon monoxide and carbon dioxide
 - Hydrocarbons
 - Dense smoke

11 Toxicological information

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

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· 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:** At present there are no ecotoxicological assessments.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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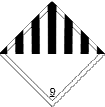
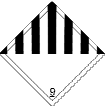

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· **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · UN-Number · DOT · IMDG, IATA | <p style="margin-left: 20px;"><i>not regulated</i></p> <p style="margin-left: 20px;">UN3077</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · IMDG, IATA | <p style="margin-left: 20px;"><i>not regulated</i></p> <p style="margin-left: 20px;">ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(copper)</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT · Class | <p style="margin-left: 20px;"><i>not regulated</i></p> |
| <ul style="list-style-type: none"> · IMDG | |
| <div style="text-align: center;">  </div> | |
| <ul style="list-style-type: none"> · Class · Label | <p style="margin-left: 20px;">9 Miscellaneous dangerous substances and articles</p> <p style="margin-left: 20px;">9</p> |
| <ul style="list-style-type: none"> · IATA | |
| <div style="display: flex; justify-content: center; gap: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> | |
| <ul style="list-style-type: none"> · Class · Label | <p style="margin-left: 20px;">9 Miscellaneous dangerous substances and articles</p> <p style="margin-left: 20px;">9</p> |
| <ul style="list-style-type: none"> · Packing group · DOT · IMDG, IATA | <p style="margin-left: 20px;"><i>not regulated</i></p> <p style="margin-left: 20px;">III</p> |
| <ul style="list-style-type: none"> · Environmental hazards: · Special marking (ADR): · Special marking (IATA): | <p style="margin-left: 20px;"><i>Symbol (fish and tree)</i></p> <p style="margin-left: 20px;"><i>Symbol (fish and tree)</i></p> |
| <ul style="list-style-type: none"> · Special precautions for user · EMS Number: · Stowage Category | <p style="margin-left: 20px;"><i>Warning: Miscellaneous dangerous substances and articles</i></p> <p style="margin-left: 20px;">F-A,S-F</p> <p style="margin-left: 20px;">A</p> |

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· Stowage Code	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (COPPER), 9, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

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

None of the ingredients is listed.

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

7440-50-8 copper

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

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **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.

· **(DSL) Canada Domestic Substance List**

All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.

· **New Jersey Right-to-Know List:**

7440-50-8 copper

7782-42-5 Graphite

· **New Jersey Special Hazardous Substance List:**

None of the ingredients is listed.

· **Pennsylvania Right-to-Know List:**

7440-50-8 copper

7782-42-5 Graphite

· **Pennsylvania Special Hazardous Substance List:**

7440-50-8 copper

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· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

7440-50-8 copper

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· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **National regulations:**

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

· **Department issuing SDS:** Environment protection department.

· **Creation Date:** 11/09/2016

· **Date of preparation / last revision** 11/09/2016 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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