

CHO-SHIELD® 610, Part A

52-03-0610-0000

SDS Revision Date (mm/dd/yyyy): 08/06/2019

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SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **CHO-SHIELD® 610, Part A**

Other means of identification : 52-03-0610-0000

Recommended use of the chemical and restrictions on use

: Three part, conductive paint coating.
No restrictions on use known.

Chemical family

: Mixture of: Silver plated copper powder; Esters; Epoxy resin; talc

SDS number

: PHC-264

Name, address, and telephone number of the manufacturer:

Parker Hannifin Corp.

Chomerics Division
77 Dragon Court
Woburn, MA, USA
01888

Manufacturer's Telephone # : (781) 935-4850

24 Hr. Emergency Tel # : INFOTRAC - (800) 535-5053 (Within Continental US); (352) 323-3500 (Outside US)

Name, address, and telephone number of the supplier:

Refer to manufacturer

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Silver Slurry. Solvent odor.

Most important hazards:

Flammable liquid and vapor. This material may be ignited by heat, sparks and direct flame.

Irritating to eyes. May cause an allergic skin reaction. Inhalation may cause central nervous system depression.

Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS.

Harmful to aquatic life with long lasting effects. Avoid release to the environment. See Section 12 for more environmental information.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:

Flammable liquid - Category 3

Eye damage/irritation - Category 2A

Skin sensitization - Category 1

Label elements

Hazard pictogram(s)



Signal Word

WARNING!

Hazard statement(s)

Flammable liquid and vapor. Causes serious eye irritation. May cause an allergic skin reaction.

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Precautionary statement(s)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing fumes, mists or vapors. Wash exposed skin thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye/face protection.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

In case of fire, use dry chemical, CO₂, or alcohol foam to extinguish.

Store in a well-ventilated place. Keep cool. Store locked up.

Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification:

Inhalation of fumes may result in metal fume fever, a flu-like illness. May cause gastrointestinal irritation. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| <u>Chemical name</u> | <u>Common name and synonyms</u> | <u>CAS #</u> | <u>Concentration (% by weight)</u> |
|--|---|--------------|------------------------------------|
| Propylene glycol monomethyl ether acetate | 2-Methoxy-1-methylethyl acetate PGMEA | 108-65-6 | 10.0 - 30.0 |
| Bisphenol A/epichlorohydrin based epoxy resin | Bisphenol-A-diglycidyl ether polymer Diglycidyl ether of bisphenol A | 25036-25-3 | 10.0 - 30.0 |
| Copper | Not available. | 7440-50-8 | 10.0 - 30.0 |
| talc | Hydrous magnesium silicate | 14807-96-6 | 3.0 - 7.0 |
| silver | Silver metal Argentum | 7440-22-4 | 1.0 - 5.0 |

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
- Inhalation* : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing has stopped, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.
- Skin contact* : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Eye contact* : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Flush eyes with water for at least 15 minutes. If eye irritation persists: get medical advice/attention.

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Most important symptoms and effects, both acute and delayed

- : Causes serious eye irritation. Contact may cause redness, swelling and a painful sensation.
May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.
- Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

Indication of any immediate medical attention and special treatment needed

- : Provide general supportive measures and treat symptomatically.
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Carbon dioxide (CO₂); Dry chemical; Alcohol resistant foam.

Unsuitable extinguishing media

- : Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Flammable liquid and vapor. This material may be ignited by heat, sparks and direct flame. Toxic fumes, gases or vapors may evolve on burning. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.106)

- : Flammable liquid - Category 3

Hazardous combustion products

- : Carbon oxides; Metal oxides; Other unidentified organic compounds.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Normal protective clothing (bunker gear) may not be adequate. A full-body encapsulating chemical protective suit may be necessary.

Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Wear appropriate protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent product from entering drains, sewers, waterways and soil. Avoid release to the environment.

Methods and material for containment and cleaning up

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- : Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

Special spill response procedures

- : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).
US CERCLA Reportable quantity (RQ): See section 15.

In Canada: Contact appropriate local and provincial environmental authorities for assistance and/or reporting requirements.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.
Use only outdoors or in a well-ventilated area. Wear suitable protective equipment during handling. Wear protective gloves and eye/face protection. Avoid breathing fumes, mists or vapors. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Contaminated work clothing must not be allowed out of the workplace.

- Conditions for safe storage** : Store in cool/well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area. Keep away from incompatibles.

- Incompatible materials** : Strong oxidizing agents; Strong acids; Strong bases; Amines; Alkali metals; Halogenated compounds; Isocyanates

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SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| <u>Exposure Limits:</u> | | | | |
|---|---|-------------|---|-------------|
| <u>Chemical Name</u> | <u>ACGIH TLV</u> | | <u>OSHA PEL</u> | |
| | <u>TWA</u> | <u>STEL</u> | <u>PEL</u> | <u>STEL</u> |
| Propylene glycol monomethyl ether acetate | 50 ppm (AIHA WEEL) | N/Av | N/Av | N/Av |
| Bisphenol A/epichlorohydrin based epoxy resin | N/Av | N/Av | N/Av | N/Av |
| Copper | 0.2 mg/m ³ (fume); 1 mg/m ³ (Dust and mist) | N/Av | 0.1 mg/m ³ (fume); 1 mg/m ³ (Dust and mist) | N/Av |
| talc | 2 mg/m ³ (respirable) (talc containing no asbestos) | N/Av | 20 mppcf | N/Av |
| silver | 0.1 mg/m ³ (dust and fume) | N/Av | 0.01 mg/m ³ | N/Av |

Exposure controls

Ventilation and engineering measures

- : Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof electrical and ventilating equipment. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection

- : If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

Skin protection

- : Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Depending on conditions of use, an impervious apron should be worn.

Eye / face protection

- : Wear eye/face protection. Wear as appropriate: Tightly fitting safety goggles; Safety glasses with side shields. A full face shield may also be necessary.

Other protective equipment

- : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

General hygiene considerations

- : Avoid breathing fumes, mists or vapors. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Contaminated work clothing must not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|------------------|
| Appearance | : Silver Slurry. |
| Odour | : Solvent odor. |
| Odour threshold | : N/Av |
| pH | : N/Av |
| Melting Point/Freezing point | : N/Av |
| Initial boiling point and boiling range | : N/Av |

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Flash point : 42°C (107.6°F) (based on ingredients)
Flashpoint (Method) : closed cup
Evaporation rate (BuAe = 1) : N/Av
Flammability (solid, gas) : Not applicable.
Lower flammable limit (% by vol.)
: N/Av
Upper flammable limit (% by vol.)
: N/Av
Oxidizing properties : None known.
Explosive properties : Not explosive
Vapour pressure : N/Av
Vapour density : N/Av
Relative density / Specific gravity
: 8.6 g/ml
Solubility in water : Insoluble.
Other solubility(ies) : N/Av
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution
: N/Av
Auto-ignition temperature : N/Av
Decomposition temperature : N/Av
Viscosity : N/Av
Volatiles (% by weight) : N/Av
Volatile organic Compounds (VOC's)
: 0 g/L
Absolute pressure of container
: N/Ap
Flame projection length : N/Ap
Other physical/chemical comments
: No additional information.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions
: Hazardous polymerization does not occur.
Conditions to avoid : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
Incompatible materials : Strong oxidizing agents; Strong acids; Strong bases; Amines; Alkali metals; Halogenated compounds; Isocyanates
Hazardous decomposition products
: None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES

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Routes of exposure skin absorption

: YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath. Inhalation of high concentrations of vapors, may cause respiratory irritation

Sign and symptoms ingestion

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

Sign and symptoms skin

: Direct skin contact may cause slight or mild, transient irritation.

Sign and symptoms eyes

: Causes serious eye irritation. Contact may cause redness, swelling and a painful sensation.

Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

Mutagenicity

: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive effects & Teratogenicity

: This product is not expected to cause reproductive or developmental effects.

Sensitization to material

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin sensitization - Category 1. May cause an allergic skin reaction. May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.

Specific target organ effects

: No data available to indicate product or components may be respiratory sensitizers. According to the classification criteria of U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012), this product is not expected to cause target organ toxicity through single or repeated exposures.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials

: None known or reported by the manufacturer.

Toxicological data

: Not classified for acute toxicity based on available data. No data is available on the product itself.
See below for individual ingredient acute toxicity data.

| <u>Chemical name</u> | LC₅₀(4hr) <u>inh, rat</u> | LD₅₀ | |
|---|---|-----------------------------|--------------------------------|
| | | <u>(Oral, rat)</u> | <u>(Rabbit, dermal)</u> |
| Propylene glycol monomethyl ether acetate | > 5320 ppm (28.7 mg/L) (vapour) | 8532 mg/kg | > 19 200 mg/kg |
| Bisphenol A/epichlorohydrin based epoxy resin | N/Av | 30 000 mg/kg | 23 500 mg/kg |
| Copper | > 5.11 mg/L (dust) (No mortality) | > 2500 mg/kg | > 2000 mg/kg |
| talc | N/Av | N/Av | N/Av |
| silver | > 5.16 mg/L (dust) (No mortality) | > 2000 mg/kg (No mortality) | > 2000 mg/kg (No mortality) |

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Other important toxicological hazards

- : Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

- : Harmful to aquatic life with long lasting effects. No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. The product contains the following substances which are hazardous for the environment: Bisphenol A/epichlorohydrin based epoxy resin.

This product also contains: Copper. The acute toxicity of copper to aquatic species varies drastically by the chemical form and correlates with the availability of free ionic copper. Aquatic toxicity is highly variable not only by organism but with physical and chemical characteristics of the water itself.

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

| <u>Ingredients</u> | CAS No | Toxicity to Fish | | |
|---|------------|---------------------------|----------------------------|----------|
| | | LC50 / 96h | NOEC / 21 day | M Factor |
| Propylene glycol monomethyl ether acetate | 108-65-6 | 161 mg/L (Fathead minnow) | N/Av | None. |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | 3.1 mg/L (Fathead minnow) | N/Av | None. |
| Copper | 7440-50-8 | N/Av | N/Av | None. |
| talc | 14807-96-6 | > 110 000 mg/L (QSAR) | 1413 mg/L (30 days) (QSAR) | None. |
| silver | 7440-22-4 | N/Av | N/Av | None. |

| <u>Ingredients</u> | CAS No | Toxicity to Daphnia | | |
|---|------------|--------------------------|----------------------------|----------|
| | | EC50 / 48h | NOEC / 21 day | M Factor |
| Propylene glycol monomethyl ether acetate | 108-65-6 | 408 mg/L (Daphnia magna) | ≥ 100 mg/L | None. |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | 1.4 mg/L (Daphnia magna) | 0.3 mg/L (Read-across) | None. |
| Copper | 7440-50-8 | N/Av | N/Av | None. |
| talc | 14807-96-6 | 36 812 mg/L (QSAR) | 1460 mg/L (30 days) (QSAR) | None. |
| silver | 7440-22-4 | N/Av | N/Av | None. |

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| Ingredients | CAS No | Toxicity to Algae | | |
|---|------------|---|-----------------------------|----------|
| | | EC50 / 96h or 72h | NOEC / 96h or 72h | M Factor |
| Propylene glycol monomethyl ether acetate | 108-65-6 | > 1000 mg/L/72hr (Green algae) | ≥ 1000 mg/L/72hr | None. |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | 9.4 mg/L/72hr (Green algae) (Read-across) | 2.8 mg/L/72hr (Read-across) | None. |
| Copper | 7440-50-8 | N/Av | N/Av | None. |
| talc | 14807-96-6 | 7203 mg/L/96hr (Green algae) (QSAR) | N/Av | None. |
| silver | 7440-22-4 | N/Av | N/Av | None. |

Persistence and degradability

- : The product itself has not been tested.
- The following ingredients are considered to be readily biodegradable: Propylene glycol monomethyl ether acetate.
- Contains the following chemicals which are not readily biodegradable: Copper; silver; Bisphenol A/epichlorohydrin based epoxy resin; talc.

Bioaccumulation potential

- : The product itself has not been tested. See the following data for ingredient information.

| Components | Partition coefficient n-octanol/water (log Kow) | Bioconcentration factor (BCF) |
|--|---|-------------------------------|
| Propylene glycol monomethyl ether acetate (CAS 108-65-6) | 0.36 | N/Av |
| Bisphenol A/epichlorohydrin based epoxy resin (CAS 25036-25-3) | > 3.0 | N/Av |
| talc (CAS 14807-96-6) | - 1.5 (estimated) | N/Av |

Mobility in soil

- : The product itself has not been tested.

Other Adverse Environmental effects

- : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling for Disposal

- : Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. This material and its container must be disposed of in a safe way.
- Empty containers retain residue and can be dangerous. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Methods of Disposal

- : Dispose in accordance with all applicable federal, state, provincial and local regulations.

RCRA

- : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

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SECTION 14. TRANSPORT INFORMATION

| Regulatory Information | UN Number | UN proper shipping name | Transport hazard class(es) | Packing Group | Label |
|---|--|-------------------------|----------------------------|---------------|---|
| 49CFR/DOT | UN1866 | RESIN SOLUTION | 3 | III |  |
| 49CFR/DOT Additional information | May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. Refer to 49 CFR 173.150(b) and Special Provision 149. | | | | |
| TDG | UN1866 | RESIN SOLUTION | 3 | III |  |
| TDG Additional information | May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. Under the TDG, refer to Section 1.17 for additional exemption requirements, if shipping under this exemption. | | | | |
| ICAO/IATA | UN1866 | Resin solution | 3 | III |  |
| ICAO/IATA Additional information | Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material. | | | | |
| IMDG | UN1866 | RESIN SOLUTION | 3 | III |  |
| IMDG Additional information | May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. | | | | |

Special precautions for user : Appropriate advice on safety must accompany the package. Keep away from heat, sparks and open flame - No smoking.

Environmental hazards : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not applicable.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:



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| Ingredients | CAS # | TSCA Inventory | CERCLA Reportable Quantity(RQ) (40 CFR 117.302): | SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355: | SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical | |
|---|------------|----------------|--|--|---|--------------------------|
| | | | | | Toxic Chemical | de minimus Concentration |
| Propylene glycol monomethyl ether acetate | 108-65-6 | Yes | None. | None. | No | N/Ap |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | Yes | None. | None. | No | N/Ap |
| Copper | 7440-50-8 | Yes | 5000 lbs / 2270 kg | None. | Yes | 1% |
| talc | 14807-96-6 | Yes | None. | None. | No | N/Ap |
| silver | 7440-22-4 | Yes | 1000 lb/454 kg | None. | Yes | 1% |

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:

Physical hazards (Flammable liquid)

Health hazards (Eye irritation; Skin sensitization)

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

| Ingredients | CAS # | California Proposition 65 | | State "Right to Know" Lists | | | | | |
|---|------------|---------------------------|------------------------------------|-----------------------------|-----|-----|-----|-----|-----|
| | | Listed | Type of Toxicity | CA | MA | MN | NJ | PA | RI |
| Propylene glycol monomethyl ether acetate | 108-65-6 | No | N/Ap | No | No | No | No | No | No |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | No | N/Ap | No | No | Yes | No | No | No |
| Copper | 7440-50-8 | No | N/Ap | Yes | Yes | Yes | Yes | Yes | Yes |
| talc | 14807-96-6 | No | N/Ap (talc containing no asbestos) | Yes | Yes | Yes | Yes | Yes | Yes |
| silver | 7440-22-4 | No | N/Ap | Yes | Yes | Yes | Yes | Yes | Yes |

California Proposition 65: This product can expose you to chemicals, which are known to the State of California to cause cancer, and, which are known to the State of California to cause birth defects or other reproductive harm. This product contains trace amounts of: Benzene (< 0.1%).

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on or are exempt from the Domestic Substances List (DSL).

Canadian National Pollutant Release Inventory (NPRI): This product contains the following substances listed on the NPRI:

Copper (Part 1, Group A Substance)

silver (Part 1, Group A Substance)

Propylene glycol monomethyl ether acetate (Part 5: Other groups and mixtures)

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.



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International Information:

Components listed below are present on the following International Inventory list:

| <u>Ingredients</u> | <u>CAS #</u> | <u>European EINECS</u> | <u>Australia AICS</u> | <u>Philippines PICCS</u> | <u>Japan ENCS</u> | <u>Korea KECI/KECL</u> | <u>China IECSC</u> | <u>NewZealand IOC</u> |
|---|--------------|------------------------|-----------------------|--------------------------|--------------------|------------------------|--------------------|---|
| Propylene glycol monomethyl ether acetate | 108-65-6 | 203-603-9 | Present | Present | (2)-3144 | KE-23315 | Present | HSR001219 |
| Bisphenol A/epichlorohydrin based epoxy resin | 25036-25-3 | Polymer | Present | Present | (7)-1279; (7)-1283 | KE-24070 | Present | May be used as a single component chemical under an appropriate group standard. |
| Copper | 7440-50-8 | 231-159-6 | Present | Present | Not listed | KE-08896 | Present | HSR002948 |
| talc | 14807-96-6 | 238-877-9 | Present | Present | (1)-468; (1)-468 | KE-32773 | Present | May be used as a single component chemical under an appropriate group standard. |
| silver | 7440-22-4 | 231-131-3 | Present | Present | Not listed | KE-31261 | Present | HSR003077 |

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- AIHA: American Industrial Hygiene Association
- CA: California
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EC50: Effective Concentration 50%
- EINECS: European Inventory of Existing Commercial chemical Substances
- ENCS: Existing and New Chemical Substances
- EPA: Environmental Protection Agency
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- IBC: Intermediate Bulk Container
- IECSC: Inventory of Existing Chemical Substances
- IMDG: International Maritime Dangerous Goods
- IOC: Inventory of Chemicals
- KECI: Korean Existing Chemicals Inventory
- KECL: Korean Existing Chemicals List
- LC: Lethal Concentration
- LD: Lethal Dose
- MA: Massachusetts
- MN: Minnesota
- N/Ap: Not Applicable
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NJ: New Jersey

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NOEC: No observable effect concentration
 NTP: National Toxicology Program
 OECD: Organisation for Economic Co-operation and Development
 OSHA: Occupational Safety and Health Administration
 PA: Pennsylvania
 PEL: Permissible exposure limit
 PICCS: Philippine Inventory of Chemicals and Chemical Substances
 RCRA: Resource Conservation and Recovery Act
 RI: Rhode Island
 RTECS: Registry of Toxic Effects of Chemical Substances
 SARA: Superfund Amendments and Reauthorization Act
 SDS: Safety Data Sheet
 STEL: Short Term Exposure Limit
 TDG: Canadian Transportation of Dangerous Goods Act & Regulations
 TLV: Threshold Limit Values
 TSCA: Toxic Substance Control Act
 TWA: Time Weighted Average
 WEEL: Workplace Environmental Exposure Level
 WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2018.
- 2. International Agency for Research on Cancer Monographs, searched 2019.
- 3. Canadian Centre for Occupational Health and Safety, CCHInfoWeb databases, 2019 (Chempendium, HSDB and RTECs).
- 4. Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists - June 2019 version.
- 6. California Proposition 65 List - June 2019 version.
- 7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2019.

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: 06/08/2019

Revision No.

: 2

Revision Information

: (M)SDS sections updated All

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

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|---|--|
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DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Parker Hannifin Corporation and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Parker Hannifin



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