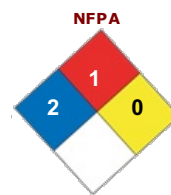


Personal Protective Equipment		WHMIS Pictograms
		
Protective Gloves	Chemical Splash Goggles	D2B Toxic

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: R500 Sn96.5Ag3.0Cu0.5
Product Code: R500
MSDS Manufacturer Number: R500
Manufacturer Name: Kester
Address: 800 W. Thorndale Avenue
 Itasca, IL 60143
General Phone Number: (630)-616-4000
Customer Service Phone Number: (800)-2KESTER (253-7837)
CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300 Outside of the U.S. and Canada: (703) 527-3887
Website: msds@kester.com
MSDS Creation Date: June 12, 2009
MSDS Revision Date: September 30, 2012



HMIS	
Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Proprietary	Proprietary	5 - 10 by weight	
Ethoxylated alcohols (C=16-18)	68439-49-6	1 - 5 by weight	
Silver	7440-22-4	1 - 5 by weight	
Terpineol	8000-41-7	1 - 5 by weight	
Tin	7440-31-5	60 - 100 by weight	

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview: CAUTION! Irritant. Exposures to soldering fumes and vapors may be irritating to eyes, respiratory system, and skin.
Route of Exposure: Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:
Eye: Smoke during soldering can cause eye irritation.
Skin: May cause skin irritation. May be absorbed through the skin in harmful amounts.
Inhalation: Inhalation of vapors, fumes or mists of the product may be irritating to the respiratory system.
Ingestion: Ingestion of the product may produce gastrointestinal irritation and disturbances.
Target Organs: Eyes. Skin. Respiratory system. Digestive system. Central nervous system. Liver. Kidney.
Aggravation of Pre-Existing Conditions: None generally recognized.

SECTION 4 - FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
Skin Contact: Immediately wash skin with soap and plenty of water.

Get medical attention if irritation develops or persists.

Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point:	> 93°C (> 199°F)
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Oxides of carbon, oxides of nitrogen, aliphatic aldehydes, and other organic substances may be formed during combustion..

NFPA Ratings:

NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	0


SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personnel Precautions:	Avoid contact with eyes and skin. Use proper personal protective equipment as listed in section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	Contain spills with an inert absorbent material such as soil, sand or oil dry. Prevent from spreading by covering, diking or other means.
Methods for cleanup:	Pick or scoop up material and put into a suitable container for proper disposal.

SECTION 7 - HANDLING and STORAGE

Handling:	Use with adequate ventilation. Avoid breathing vapor and fumes. Use only in accordance with directions.
Storage:	Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep container tightly closed when not in use. Recommended storage temperature is at or near 5°C or 42°F.
Hygiene Practices:	Wash thoroughly after handling. Avoid inhaling vapors, mists, or fumes.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls:	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Eye/Face Protection:	Tightly fitting safety goggles.
Skin Protection Description:	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data. Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	The need for respiratory protection will vary according to the airborne concentration of the decomposition products released and accumulated in the area. In case of insufficient ventilation, wear suitable respiratory equipment. Wear the appropriate respiratory protection according to the conditions and exposure levels in the area.
PPE Pictograms:	

EXPOSURE GUIDELINES

Silver:

Guideline ACGIH:	TLV-TWA: 0.1 mg/m ³
Guideline OSHA:	PEL-TWA: 0.01 mg/m ³

Tin:

Guideline ACGIH:	TLV-TWA: 2 mg/m ³
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SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance:	Paste.
Color:	Silver Gray
Boiling Point:	Not determined.
Melting Point:	Not determined.
Density:	> 4.5 g/cm ³ at 20°C (68°F)
Solubility:	Insoluble
Flash Point:	> 93°C (> 199°F)
Explosive Properties:	Product does not present an explosion hazard.

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Conditions to Avoid:	No thermal decomposition if used according to specifications.
Incompatible Materials:	Oxidizing agents. Strong acids and alkalis.

SECTION 11 - TOXICOLOGICAL INFORMATION**Ethoxylated alcohols (C=16-18):**

Eye:	Eye - Rabbit Standard Draize test.: 100 uL/24H [Moderate] (RTECS)
Skin:	Administration onto the skin - Rabbit LDLo : 1260 mg/kg [Behavioral - Food intake (animal) Gastrointestinal - Other changes Liver - Other changes] Administration onto the skin - Rabbit Standard Draize test.: 500 uL/24H [Moderate] (RTECS)
Ingestion:	Oral - Rat LD50 : 1260 mg/kg [Behavioral - Food intake (animal) Lungs, Thorax, or Respiration - Other changes Liver - Other changes] (RTECS)

Silver:

Ingestion:	Oral - Mouse LD50: 100 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
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SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Fate:	No environmental information found for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal:	Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.
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SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name:	Not Regulated.
DOT UN Number:	Not Regulated.
IATA Shipping Name:	Not Regulated.
IATA UN Number:	Not Regulated.
IMDG UN Number :	Not Regulated.
IMDG Shipping Name :	Not Regulated.
ADR UN Number:	Not Regulated.
ADR Shipping Name :	Not Regulated.
RID UN Number :	Not Regulated.
RID Shipping Name :	Not Regulated.

ICAO UN Number : Not Regulated.
ICAO Shipping Name: Not Regulated.

SECTION 15 - REGULATORY INFORMATION

Canada WHMIS: Controlled - Class: D2B Toxic

Risk Phrases: R42/43 May cause sensitization by inhalation and skin contact.
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrase: S2 Keep out of the reach of children.
S22 Do not breathe dust.
S24 Avoid contact with skin.
S37 Wear suitable gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S56 Dispose of this material and its container to hazardous or special waste collection point.
S63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Ethoxylated alcohols (C=16-18):

TSCA Inventory Status: Listed

Canada DSL: Listed

Silver :

TSCA Inventory Status: Listed

Canada DSL: Listed

Terpineol :

TSCA Inventory Status: Listed

Canada DSL: Listed

Tin:

TSCA Inventory Status: Listed

Canada DSL: Listed

GHS Pictograms:



SECTION 16 - ADDITIONAL INFORMATION

HMIS Health Hazard: 2

HMIS Fire Hazard: 1

HMIS Reactivity: 0

MSDS Creation Date: June 12, 2009

MSDS Revision Date: September 30, 2012

Disclaimer: The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Kester extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The data on this Material Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Material Safety Data Sheet as a source for hazard information.

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