

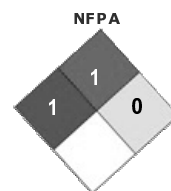


<b>Personal Protective Equipment</b>		<b>DOT Pictograms</b>	
		<b>Not Regulated</b>	
Protective Gloves	Chemical Splash Goggles		

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: **TSF-6502**  
 Product Code: TSF-6502  
 MSDS Manufacturer Number: TSF-6502  
 Manufacturer Name: Kester  
 Address: 800 W. Thomdale 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: May 14, 2009  
 MSDS Revision Date: September 30, 2012  
 MSDS Format: According to ANSI Z400.1-2004



HMIS	
Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	1

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Non hazardous	Not Available	1 - 5 by weight	
Tripropylene glycol methyl ether	25498-49-1	10 - 30 by weight	
Hydrogenated Rosin	65997-06-0	10 - 30 by weight	
Glycol	Proprietary	5 - 10 by weight	
Polymerized rosin	65997-05-9	30 - 60 by weight	
N-Methyl-2-pyrrolidone	872-50-4	1 - 5 by weight	
Amine	Proprietary	0.1 - 1 by weight	

## SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview: 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.

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.

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.

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: No Data

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: 1

NFPA Flammability: 1

NFPA Reactivity: 0

NFPA Other:

## 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 in a dry location.

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

#### **Amine:**

**SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES**

Physical State Appearance: No Data  
Color: No Data  
Boiling Point: No Data  
Melting Point: No Data  
Density: No Data  
Solubility: No Data  
Flash Point: No Data

**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.  
Special Decomposition Products: When heated to soldering temperatures, the solvents are evaporated and rosin may be thermally degraded to liberate aliphatic aldehydes and acids.

**SECTION 11 - TOXICOLOGICAL INFORMATION****Glycol:**

Ingestion: Oral - Rat LD50 : 3 gm/kg [Details of toxic effects not reported other than lethal dose value]

**N-Methyl-2-pyrrolidone:**

Eye: Eye - Rabbit Standard Draize test.: 100 mg  
Skin: Administration onto the skin - Rabbit LD50: 8 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Ingestion: Oral - Rat LD50: 3914 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Mouse LD50: 5130 mg/kg [Details of toxic effects not reported other than lethal dose value]

**Amine:**

Eye: Eye - Rabbit Standard Draize test.: 20 mg  
Eye - Rabbit Standard Draize test.: 10 mg  
Skin: Administration onto the skin - Rat LD50: >16 mL/kg [Details of toxic effects not reported other than lethal dose value]  
Administration onto the skin - Rabbit LD50: >20 mL/kg [Details of toxic effects not reported other than lethal dose value]  
Ingestion: Oral - Rat LD50: 4920 uL/kg [Sense Organs and Special Senses (Eye) - Lacrimation Gastrointestinal - Hypermotility, diarrhea Skin and Appendages - Hair]  
Oral - Mouse LD50: 5846 mg/kg [Behavioral - Convulsions or effect on seizure threshold Gastrointestinal - Hypermotility, diarrhea Kidney/Ureter/Bladder - Other changes]  
Carcinogenicity: IARC: Group 3: Unclassifiable as to carcinogenicity to humans.


**SECTION 12 - ECOLOGICAL INFORMATION**

Ecotoxicity: Do not allow product to reach ground water, water course or sewage system.  
Effect of Material On Aquatic Life: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.

**SECTION 14 - TRANSPORT INFORMATION**

IATA Shipping Name: Not Regulated.  
IATA UN Number: Not Regulated.  
DOT Pictograms:   
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

SARA: This product does not contain any chemicals which are listed in the SARA Title III Extremely Hazardous Substances (EHS)

Canada WHMIS: Controlled - Class: D2B Toxic

**Hydrogenated Rosin:**

TSCA Inventory Status: Listed  
Canada DSL: Listed

**Glycol:**

TSCA Inventory Status: Listed  
Canada DSL: Listed

**Polymerized rosin:**

TSCA Inventory Status: Listed  
Canada DSL: Listed

**N-Methyl-2-pyrrolidone:**

TSCA Inventory Status: Listed  
Section 313: Listed  
California PROP 65: Listed: developmental  
New Jersey: Listed: NJ Hazardous List; Substance Number: 3716  
Massachusetts: Listed  
Pennsylvania: Listed  
Canada DSL: Listed

**Amine:**

TSCA Inventory Status: Listed  
Massachusetts: Listed  
Pennsylvania: Listed  
Canada DSL: Listed  
Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1621(1663)

## SECTION 16 - ADDITIONAL INFORMATION

HMIS Health Hazard: 1  
HMIS Fire Hazard: 1  
HMIS Reactivity: 0  
HMIS Personal Protection: 1  
MSDS Creation Date: May 14, 2009  
MSDS Revision Date: September 30, 2012

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as a source for hazard information.

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