



# MATERIAL SAFETY DATA SHEET

Date Issued: 08/18/2011  
MSDS No: TC 533  
Date Revised: 09/24/2013  
Revision No: 4

## Kester TC 533

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Kester TC 533  
**PRODUCT DESCRIPTION:** Natural Latex Solder Mask  
**PRODUCT CODE:** TC 533

#### MANUFACTURER

Techspray, L.P.  
1001 N.W. 1st Street  
P.O. Box 949  
Amarillo, TX 79107  
**Emergency Contact:** Chemtrec  
**Emergency Phone:** 1-800-858-4043  
**Service Number:** 1-800-858-4043

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC CCN#21858 (US Transportation) :**(800) 424 - 9300  
**CANUTEC (Canadian Transportation) :**(613) 996 - 6666  
**Emergency Phone :**(800) 858 - 4043

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** May cause skin/eye irritaton. May be harmful if swallowed.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Avoid contact with eyes; may cause redness, irritation and conjunctivitis.

**SKIN:** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

**INGESTION:** Ingestion may cause nausea and diarrhea.

**INHALATION:** Headache, nausea, and possible coordination problems.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Contact may cause eye irritation.

**SKIN:** Prolonged or exposure may cause skin irritation.

**INGESTION:** Ingestion may result in diarrhea and/or nausea.

**INHALATION:** Vapor inhalation can result in headache, nausea, and coordination problems.

**ACUTE TOXICITY:** Low hazard for usual industrial or commercial handling.

**CARCINOGENICITY:** Titanium dioxide (13463-67-7) is IARC-listed as 2B: Possibly carcinogenic to humans

**MUTAGENICITY:** Not Established

#### REPRODUCTIVE TOXICITY

**REPRODUCTIVE EFFECTS:** Not Established

**TERATOGENIC EFFECTS:** Not considered a developmental toxicant.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS



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Chemical Name	Wt.%	CAS	EINECS
Titanium dioxide	0.1 - 1	13463-67-7	2366755
Kaolin	10 - 30	1332-58-7	
Paraffin waxes and hydrocarbon waxes	1 - 5	8002-74-2	
Natural Latex Compound	60 - 100	9003-31-0	

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** If swallowed, gently wipe or rinse the inside of the mouth with water. DO NOT induce vomiting. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Immediately contact a poison control center, emergency room or physician as further treatment may be necessary.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** None

**EXTINGUISHING MEDIA:** Water, foam, dry chemical, carbon dioxide.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of carbon, nitrogen, aliphatic aldehydes, and other organic substances may be formed during combustion.

**FIRE FIGHTING PROCEDURES:** Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None Expected.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on adsorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

**GENERAL PROCEDURES:** Absorb the liquid and scrub the area with detergent and water.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Wash thoroughly after handling. Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Store in a cool dry place.

**HANDLING:** Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements



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because dangerous decomposition products may form.

**STORAGE:** Store in a cool place in original container and protect from sunlight. Keep away from heat and flame.

**STORAGE TEMPERATURE:** Store in a cool place below ( 120 ) F ( 49 ) C.

**STORAGE PRESSURE:** Store at local atmospheric pressure.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Titanium dioxide	TWA	5 mg/m <sup>3</sup>	10	10 mg/m <sup>3</sup> <sup>[1]</sup>	10 <sup>[1]</sup>	NL	NL
	STEL	NL	NL	NL	NL	NL	NL
<b>OSHA TABLE COMMENTS:</b>							
1. Total dust							

**ENGINEERING CONTROLS:** Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**SKIN:** The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Viton, Solvex, Butyl, Buna, Neoprene.

**RESPIRATORY:** NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**WORK HYGIENIC PRACTICES:** Wash hands before eating and wash before reuse.

**OTHER USE PRECAUTIONS:** Emergency shower and eyewash facility should be in close proximity.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Ammoniacal odor.

**APPEARANCE:** Gel-like.

**COLOR:** Tan/off-white

**pH:** 10 to 11

**PERCENT VOLATILE:** 64-66

**VAPOR PRESSURE:** 14 mmHg at 20°C (68°F)

**VAPOR DENSITY:** Not Available



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**BOILING POINT:** 100°C (212°F)

**FLASHPOINT AND METHOD:** None

**SPECIFIC GRAVITY:** ~ 1.000 at 20°C (68°F)

**VISCOSITY #1:** 9000 to 14000 Centipoise at 25°C

**(VOC):** TC-533 is considered zero-VOC or VOC-free, as it contains < 5 g/L VOC.

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Not Established

**CONDITIONS TO AVOID:** Heat, flames, ignition sources, and incompatibles.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon (CO and CO<sub>2</sub>) may form when heated to decomposition.

**INCOMPATIBLE MATERIALS:** Strong acids, oxidizers, corrosive materials.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

**DERMAL LD<sub>50</sub>:** Mildly to moderately irritating.

**ORAL LD<sub>50</sub>:** May cause irritation.

**INHALATION LC<sub>50</sub>:** May cause irritation.

**EYE EFFECTS:** Mixture is a moderate eye irritant.

**SKIN EFFECTS:** The mixture is a mild to severe skin irritant but is not a skin sensitizer in animals.

**CHRONIC:** Not Available

#### CARCINOGENICITY

**IARC:** Titanium dioxide (13463-67-7) is IARC-listed as 2B: Possibly carcinogenic to humans

**NEUROTOXICITY:** NOT listed

**REPRODUCTIVE EFFECTS:** NOT listed

**TERATOGENIC EFFECTS:** Not Established

**MUTAGENICITY:** Collective data indicate non-mutagenic.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** There is limited information available on the environmental fate and effects of this material. The primary environmental concern for release is the impact on aquatic and terrestrial species. Due care should be taken to avoid the accidental release of this material into the environment.

**ECOTOXICOLOGICAL INFORMATION:** Not Established

**CHEMICAL FATE INFORMATION:** Not Available

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Federal, State, and Local laws governing disposal of materials can differ. Ensure compliance with proper authorities before disposal.

**GENERAL COMMENTS:** Dispose of in a manner consistent with federal, state, and local regulations.



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### 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Not regulated

**UN/NA NUMBER:** NA

**PACKING GROUP:** NA

#### ROAD AND RAIL (ADR/RID)

**PROPER SHIPPING NAME:** Not regulated

#### AIR (ICAO/IATA)

**SHIPPING NAME:** Not regulated

**UN/NA NUMBER:** NA

**PACKING GROUP:** NA

#### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Not regulated

**UN/NA NUMBER:** NA

**PACKING GROUP:** NA

### 15. REGULATORY INFORMATION

#### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**313 REPORTABLE INGREDIENTS:** Not Applicable

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** Ammonia (7664-41-7)

**THRESHOLD QUANTITY:** 500

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Titanium dioxide	13463-67-7

**TSCA STATUS:** All chemicals in this product are listed in the TSCA inventory.

#### OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

**29 CFR 1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS:** None of the chemicals in this product are considered highly hazardous by OSHA.

**CALIFORNIA PROPOSITION 65:** This product does not contain any chemicals known to the State of California to cause cancer.

**OSHA HAZARD COMM. RULE:** Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### CANADA

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHMIS CLASS:** Class D2A - Very Toxic

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### 16. OTHER INFORMATION

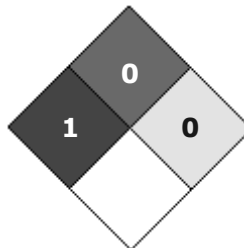
**APPROVED BY:** Pierce A. Pillon     **TITLE:** Chemist

**REVISION SUMMARY:** This MSDS replaces the 09/24/2013 MSDS. Revised: **Section 9:** (VOC).

#### HMIS RATING

<b>HEALTH</b>	<input type="text"/>	<b>1</b>
<b>FLAMMABILITY</b>	<input type="text"/>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<input type="text"/>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<input type="text"/>	

#### NFPA CODES



**DATA SOURCES:** Code of Federal Regulations (CFR) The Sigma-Aldrich Library of Regulatory and Safety Data  
 OSHA Hazard Communication Standard (29CFR1910.1200) Various Federal, State and Local Regulations

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