MATERIAL SAFETY DATA SHEET

Finished Product

TECHSPRAY

Date-Issued : 01/10/2003 MSDS Ref. No : 2207-G/5G Date-Revised : 11/23/2005 Revision No : 3

Wondermask WS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Wondermask WS **PRODUCT DESCRIPTION:** Wave solder process masking agent **PRODUCT CODE:** 2207/CAN/EUR-P, G, 5G

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

Techspray, L.P. 1001 N.W. 1st Street P.O. Box 949 Amarillo, TX 79107 **Contact:** Chemtrec **Product Stewardship:** 1-800-858-4043 CHEMTREC (US Transportation) : (800) 424 - 9300 CANUTEC (Canadian Transportation) : (613) 996 - 6666 Emergency Phone : (800) 858 - 4043

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	<u>Content</u>	CAS	EINECS
Solvent Refined, Hydrotreated Middle Distillate	< 1	64742-46- 7	
1,2,3- Propanetriol	1 - 5	56-81-5	200-289- 5
2-Propanol	1 - 5	67-63-0	200-661- 0
Water	7 - 11	7732-18-5	231-791- 2
Potassium Hydroxide	1 - 3	1310-58-3	215-181- 3
Sodium salt of polymeric carboxylic acid	45 - 55		
Titanium dioxide	1 - 3	13463-67- 7	2366755
DIATOMACEOUS EARTH/ATTAPULGITE CLAY	5 - 10	8031-18-3	
Fragrance	< 1		

EEC LABEL SYMBOL AND CLASSIFICATION



R36/37/38 - Irritating to eyes, respiratory system and skin.

EEC Irritant - "Xi"

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

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

POTENTIAL HEALTH EFFECTS

EYES: Moderately irritating to the eyes.

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: Symptoms of overexposure include: stinging, tearing, redness and pain.

SKIN: Prolonged or exposure may cause skin irritation.

INGESTION: Ingestion may result in diarhea and/or nausea.

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

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

CHRONIC: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

CARCINOGENICITY: Titanium (IV) oxide is listed by IARC as a possible carcinogen.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: Not considered a developmental toxicant.

CANCER STATEMENT: Possible cancer hazard based on tests with laboratory animals.

4. FIRST AID MEASURES

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Available

FLAMMABLE LIMITS: NA to NA

GENERAL HAZARD: Vapors can travel to a source of ignition and flash back.

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

HAZARDOUS COMBUSTION PRODUCTS: Smoke, fumes and oxides of carbon.

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: Absorb liquid and place in sealed container for disposal. Vapors can travel to an ignition source.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: NEVER FLUSH TO SEWER.

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

RELEASE NOTES: Spills and releases may have to be reported to Federal and/or local authorities.

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: Empty containers will retain product residue and vapor and should be handled as if they were full.

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

STORAGE PRESSURE: Store at local atomspheric pressure.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

	EXPOSURE LIMITS					
Chemical Name	OSHA PEL		ACGIH TLV		<u>Supplier OEL</u>	
	<u>ppm</u>	mg/m ³	<u>ppm</u>	mg/m ³	<u>ppm</u>	mg/m ³

Solvent Refined, Hydrotreated Middle Distillate	TWA		5 mg/ m3 ^[1]			
1,2,3- Propanetriol	TWA _{NL} ^[2]	10*,5^ mg/m3	10 ppm [3]	NL	NL	NL
	STEL NL	NL	NL	NL	NL	NL
2-Propanol	TWA $\frac{400}{\text{ppm}}$	980 mg/m3	400 ppm	983 mg/m3	NL	NL
	STEL ⁵⁰⁰ ppm	1225 mg/m3	500 ppm	1230 mg/m3	NL	NL
Potassium Hydroxide	TWA _{NL} ^[4]	NL	NL	NL	NL	NL
	STEL NL	C 2	NL	C 2	NL	NL
Titanium dioxide	TWA $\frac{5 \text{ mg}}{\text{m3}}$	10	10 mg/ m3 ^[5]	10	NL	NL
	STEL NL	NL	NL	NL	NL	NL

OSHA TABLE COMMENTS:

1. Exposure Limit applicable for vapor or mist only

2. * = Total dust, ^ = Respirable fraction

3. NL = Not Listed

4. NL = Not Listed, C = Ceiling

5. Total dust

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

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: Alcohol odor APPEARANCE: Gel-like. COLOR: White pH: Not Applicable PERCENT VOLATILE: 60 SOLUBILITY IN WATER: 40 **DENSITY: 1.15** VISCOSITY: 18000 to 20000 Centipoise at 25°C (VOC): 91.7 g/L (non-exempt VOC)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, flames, ignition sources, and incompatables.

STABILITY: Stable under normal conditions.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of Carbon (CO and CO2) may form when heated to decomposition.

INCOMPATIBLE MATERIALS: Metals. Acidic conditions. Oxidizing materials.

11. TOXICOLOGICAL INFORMATION ACUTE

DERMAL LD₅₀: 12800 mg/kg (rabbit)

ORAL LD₅₀: 273 mg/kg (rat)

Toxic, corrosive, dust irritant

EYE EFFECTS: Mixture is a moderate eye irritant.

SKIN EFFECTS: Causes irritation to skin.

CARCINOGENICITY:

IARC: Titanium (IV) oxide

MUTAGENICITY: Collective data indicate non-mutagenic.

REPRODUCTIVE EFFECTS: NOT listed

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: Isopropyl alcohol has a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.

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.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION) PROPER SHIPPING NAME: Nonhazardous UN/NA NUMBER: NA PACKING GROUP: NA

ROAD AND RAIL (ADR/RID): HAZARD CLASS: No classification

AIR (ICAO/IATA) PROPER SHIPPING NAME: Nonhazardous UN/NA NUMBER: NA PACKING GROUP: NA

VESSEL (IMO/IMDG) PROPER SHIPPING NAME: Nonhazardous UN/NA NUMBER: NA PACKING GROUP: NA

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: IMMEDIATE / DELAYED

ACUTE: YES CHRONIC: YES

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: Listed in Table 302.4 of 40 CFR Part 302 as a hazardous substance with a reportable quantity of 1000 lbs.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Potassium hydroxide

CERCLA RQ: 1000 Lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All components of this product are either listed or exempt from listing in the TSCA inventory.

OSHA HAZARD COMM. RULE: Contents of this MSDS comply with the OSHA Hazard Communication

Standard 29 CFR 1910.1200.

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.

EUROPEAN COMMUNITY

EEC LABEL SYMBOL AND CLASSIFICATION



R36/37/38 - Irritating to eyes, respiratory system and skin.

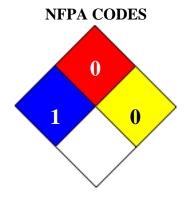
EEC Irritant - "Xi"

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

16. OTHER INFORMATION

APPROVED BY: Pierce A. Pillon TITLE: Chemist

REVISION SUMMARY Revision #: 3 This MSDS replaces the December 09, 2004 MSDS. Any changes in information are as follows: In Section 15 RCRA Status



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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