

MATERIAL SAFETY DATA SHEET

Finished Product



Date Issued: 01/18/2003
MSDS No: 2507-N
Date Revised: 03/02/2012
Revision No: 9

Trace Technologies No-Clean Flux Dispensing Pen

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Trace Technologies No-Clean Flux Dispensing Pen

PRODUCT DESCRIPTION: Flux Dispensing Pen

PRODUCT CODE: 2507/CAN/EUR-N

ACTIVE INGREDIENT(S): 2-Propanol

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

HAZARD DESIGNATION

"F" - Highly flammable

R11 - Highly flammable.

"Xi" - Irritant

R36/38 - Irritating to eyes and skin.

"N" - Dangerous for the environment

R52 - Harmful to aquatic organisms.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Transparent, colorless liquid.

IMMEDIATE CONCERNS: Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Causes skin irritation. Harmful if swallowed.

POTENTIAL HEALTH EFFECTS

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

SKIN: Prolonged or repeated skin contact may cause irritation.

INGESTION: Ingestion of large amounts may produce abdominal pain, nausea and vomiting. Swallowing small amounts is not likely to produce harmful effects.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Liquid splashed in the eye may cause redness, irritation and conjunctivitis.

SKIN: Prolonged or exposure may cause skin irritation.

INGESTION: For large amounts; abdominal pain, nausea and vomiting.

INHALATION: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis and loss of consciousness).

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

CARCINOGENICITY: NOT listed

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Trace Technologies No-Clean Flux Dispensing Pen**REPRODUCTIVE TOXICITY****REPRODUCTIVE EFFECTS:** Not Established**TERATOGENIC EFFECTS:** Not considered a developmental toxicant.**TARGET ORGAN STATEMENT:** Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.**CANCER STATEMENT:** NOT listed**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	Wt. %	CAS	EINECS
2-Propanol	90 - 100	67-63-0	200-661-7
Non-ionic flux mixture (Proprietary non-hazardous blend)	1 - 10		NIF

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:** Aspiration hazard. If swallowed, vomiting may occur spontaneously, but do not induce. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Call a physician immediately.**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.**5. FIRE FIGHTING MEASURES****FLASHPOINT AND METHOD:** (53°F) TAG CC**FLAMMABLE LIMITS:** 2.0 to 12.0**GENERAL HAZARD:** Vapors can travel to a source of ignition and flash back.**EXTINGUISHING MEDIA:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.**HAZARDOUS COMBUSTION PRODUCTS:** Smoke, fumes and oxides of carbon.**FIRE FIGHTING PROCEDURES:** Evacuate area and fight fire from a safe distance.**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.**6. ACCIDENTAL RELEASE MEASURES****SMALL SPILL:** Contain spill with dike to prevent entry into sewers.**LARGE SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.**GENERAL PROCEDURES:** 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 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, gravel, etc. as necessary and place in closed containers for disposal.**SPECIAL PROTECTIVE EQUIPMENT:** Only personnel equipped with proper respiratory and skin/eye protection

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should be permitted in area. See Section 8 for details.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Wash thoroughly after handling. Use only in a well ventilated area. 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 because dangerous decomposition products may form.

STORAGE: Store away from heat.

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 ³	ppm	mg/m ³	ppm	mg/m ³
2-Propanol	TWA	400 ppm	980 mg/m ³	400 ppm	983 mg/m ³	NL [1]	NL [1]
	STEL	500 ppm	1225 mg/m ³	500 ppm	1230 mg/m ³	NL	NL

OSHA TABLE COMMENTS:

1. NL = Not Listed

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: 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.

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Chemical Name	Flash Point (°C)	Boiling Point (°C)	Specific Gravity
2-Propanol	11.7	82.4	0.785

PHYSICAL STATE: Liquid**ODOR:** Alcohol odor**APPEARANCE:** Clear, Colorless liquid**PERCENT VOLATILE:** 97 - 98**VAPOR DENSITY:** 2.1 (Air=1)**BOILING POINT:** to 80°C (176°F)**FLASHPOINT AND METHOD:** (53°F) TAG CC**SOLUBILITY IN WATER:** Partially Soluble**SPECIFIC GRAVITY:** to 0.786 (water=1)**(VOC):** to 787 g/L (non-exempt VOC)**10. STABILITY AND REACTIVITY****STABILITY:** Stable.**POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** Heat, flames, ignition sources, and incompatibles.**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon (CO and CO₂) may form when heated to decomposition.**INCOMPATIBLE MATERIALS:** Strong acids and alkalis, reactive metals and strong oxidizing agents.**11. TOXICOLOGICAL INFORMATION****ACUTE****DERMAL LD₅₀:** 12800 mg/kg (rabbit)**ORAL LD₅₀:** 5045 mg/kg (rat)**INHALATION LC₅₀:** Slight to very low toxicity.**NOTES:** Fumes/liquid -- Irritant**EYE EFFECTS:** Mixture is a moderate eye irritant.**CARCINOGENICITY**

Chemical Name	NTP Status	IARC Status	OSHA Status
2-Propanol	NOT LISTED	NOT LISTED	NOT LISTED

IARC: NOT listed

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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.

FOR LARGE SPILLS: Contaminated sawdust, vermiculite, or porous surfaces must be disposed of in a permitted hazardous waste management facility. Recovered liquids may be reprocessed or incinerated or must be treated in a permitted hazardous waste management facility.

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

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** CONSUMER COMMODITY ORM-D**UN/NA NUMBER:** N/A**PACKING GROUP:** N/A**OTHER SHIPPING INFORMATION:** "THIS PACKAGE CONFORMS TO 49CFR 173.4." must be on package.**ROAD AND RAIL (ADR/RID)****KEMLER NUMBER:** UN1219**HAZARD CLASS:** 3**AIR (ICAO/IATA)****SHIPPING NAME:** CONSUMER COMMODITY ID8000**UN/NA NUMBER:** ID8000**PRIMARY HAZARD CLASS/DIVISION:** 9**PACKING GROUP:** N/A**VESSEL (IMO/IMDG)****SHIPPING NAME:** ISOPROPANOL

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Chemical Name	Wt. %	CAS
2-Propanol	90 - 100	67-63-0

TITLE III NOTES: Not listed as an Extremely Hazardous Substance.**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
2-Propanol	67-63-0

TSCA STATUS: All components of this product are either listed or exempt from listing 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.**RCRA STATUS:** D001**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 B2 - Flammable Liquids. Class D2B - Toxic Materials.**EUROPEAN COMMUNITY**

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"N" - Dangerous for the environment
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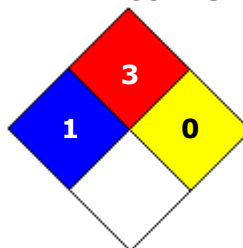
16. OTHER INFORMATION

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

REVISION SUMMARY: This MSDS replaces the 10/11/2010 MSDS.

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	3
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

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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