MATERIAL SAFETY DATA SHEET

Finished Product



Date-Issued: 01/18/2003 **MSDS Ref. No:** 2509-GN **Date-Revised:** 06/08/2004

Revision No: 1

Trace Technologies Overcoat Pen (Green)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Trace Technologies Overcoat Pen (Green) **PRODUCT DESCRIPTION:** Circuit Board Insulating Pen

PRODUCT CODE: 2509/CAN/EUR-GN

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

Techspray, L.P. 1001 N.W. 1st Street

D.O. Day 040

P.O. Box 949

Amarillo, TX 79107 **Contact:** Chemtrec

Product Stewardship: 1-800-858-4043

CHEMTREC (U.S.): (800) 424-9300

CANUTEC: (613) 996-6666

Emergency Phone: 1-800-858-4043

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	<u>Wt.%</u>	CAS#	EINECS#
Acetone	25 - 35	67-64-1	200-662- 2
n-Propyl acetate	50 - 60	109-60- 4	2036861
Acrylic Polymer (non-hazardous)	15 - 25		

EEC LABEL SYMBOL AND CLASSIFICATION



R11 - Highly flammable.

EEC Highly flammable - "F"



R20/21 - Harmful by inhalation and in contact with skin.

EEC Harmful - "Xn"

R36 - Irritating to eyes.



R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

EEC Environment - "N"

3. HAZARDS IDENTIFICATION

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

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

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

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: 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 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 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					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		<u>ppm</u>	$\underline{mg/m}^{\underline{3}}$	<u>ppm</u>	$mg/m^{\frac{3}{2}}$	<u>ppm</u>	mg/m^{3}
Acetone	TWA	750 ^[1]	1800	750	1780	NL	NL
	STEL	1000	2400	1000	2380	NL	NL
n-Propyl acetate	TWA		200		200		
	STEL		250		250		

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.

Butyl Rubber Solvex

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:** Sweet ester odor.

APPEARANCE: Clear, Colorless liquid **PERCENT VOLATILE:** 79 at 20°C (68°F)

VAPOR DENSITY: >1 (Air=1) BOILING POINT: to 110°C (230°F) SOLUBILITY IN WATER: Insoluble

10. STABILITY AND REACTIVITY

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

STABILITY: Stable.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide and carbon Monoxide may form when heated to decomposition.

INCOMPATIBLE MATERIALS: Strong acids and alkalis, reactive metals and strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 2000 mg/kg (rabbit)

ORAL LD₅₀: 5800 mg/kg (rat)

INHALATION LC₅₀: 50100 ppm, 8-hour

Fumes/liquid -- Irritant

EYE EFFECTS: Mixture is a moderate eye irritant.

CARCINOGENICITY:

IARC: NOT listed

NTP: NOT listed

OSHA: NOT listed

MUTAGENICITY: Collective data indicate non-mutagenic.

REPRODUCTIVE EFFECTS: NOT listed

NEUROTOXICITY: Not Established

TERATOGENIC EFFECTS: Not Available

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.

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: Nonhazardous

UN/NA NUMBER: N/A PACKING GROUP: N/A

OTHER SHIPPING INFORMATION: "THIS PACKAGE CONFORMS TO 49CFR 173.4." must be on

package.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Nonhazardous PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: ID8000 PACKING GROUP: N/A

LABEL: Must put EXCEPTED QUANTITY label on package.

IATA NOTE: Domestic shipments only. When shipping International contact TechSpray shipping department.

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Flammable Liquid N.O.S. (n-propyl acetate)

PRIMARY HAZARD CLASS/DIVISION: 3.2

UN/NA NUMBER: UN1993 PACKING GROUP: II IMDG NOTE: Page 3230

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: IMMEDIATE / DELAYED

FIRE: YES PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: YES

CHRONIC: YES

313 REPORTABLE INGREDIENTS: Acetone (CAS# 67-67-1)

TITLE III NOTES: Not listed as an Extremely Hazardous Substance.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Acetone (67-64-1)

CERCLA RQ: 5000 lbs

TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

RCRA STATUS: U002 D001

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.

CANADA

WHMIS (WORKER 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.

EUROPEAN COMMUNITY

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

16. OTHER INFORMATION

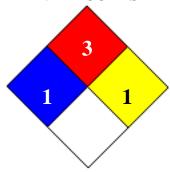
APPROVED BY: Pierce A. Pillon **TITLE:** Chemist

REVISION SUMMARY Revision #: 1

This MSDS replaces the January 18, 2003 MSDS. Any changes in information are as follows: In Section 9
Specific Gravity (Unit)

In Section 15 EEC Symbol Id. EEC Risk Phrase Codes

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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