

MATERIAL SAFETY DATA SHEET

Finished Product



Date Issued: 01/18/2003

MSDS No: 2510-N

Date Revised: 03/04/2010

Revision No: 8

Trace Technologies Conformal Coating Remover

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Trace Technologies Conformal Coating Remover

PRODUCT DESCRIPTION: Conformal Coating Remover

PRODUCT CODE: 2510/CAN/EUR-N

MANUFACTURER

Techspray, L.P.
1001 N.W. 1st Street
P.O. Box 949
Amarillo TX 79107

Emergency Contact: Chemtrec

Product Stewardship: 1-800-858-4043

Service Number: 1-800-858-4043

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (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.

R19 - May form explosive peroxides.

"T" - Toxic

R23/25 - Toxic by inhalation and if swallowed.

"Xi" - Irritant

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Transparent, colorless liquid.

IMMEDIATE CONCERNS: Extremely flammable liquid and vapor.

POTENTIAL HEALTH EFFECTS

EYES: Substance causes substantial eye irritation.

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

SKIN ABSORPTION: Skin absorption can occur.

INGESTION: Substance may be harmful if swallowed.

INHALATION: High concentrations in immediate area can displace oxygen and can cause dizziness, unconsciousness, and possibly death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

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

SKIN: Prolonged exposure causes redness, pain, drying and cracking of the skin.

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

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

ACUTE TOXICITY: Overexposure may cause dizziness and loss of concentration. At higher levels, CNS depression and cardiac arrhythmia may result.

CARCINOGENICITY: NOT listed

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: NOT listed

TERATOGENIC EFFECTS: Not considered a developmental toxicant.

TARGET ORGAN STATEMENT: Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Tetrahydrofuran	> 99	109-99-9	203-726-8
BHT	< 0.1	128-37-0	

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

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 or give oxygen by trained personnel. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: -14.4°C (6°F) TAG CC

FLAMMABLE LIMITS: 2.0 to 11.8

AUTOIGNITION TEMPERATURE: to 321°C (610°F)

GENERAL HAZARD: Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point.

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

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

EXPLOSION HAZARDS: Vapors may form explosive mixture with air.

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: Contain spill with dike to prevent entry into sewers.

LARGE SPILL: If this material is released into a work area, evacuate the area immediately.

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.

COMMENTS: Remove all sources of ignition. Use spark-proof tools.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Wash thoroughly after handling. Use only in a well ventilated area. Store in a cool dry place.

HANDLING: Ground and bond containers when transferring material.

STORAGE: 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

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Tetrahydrofuran	TWA	200 ppm ^[1]	250 mg/m ³ ^[1]	200 ppm	590 mg/m ³	NL ppm	NL mg/m ³
	STEL	590 ppm	735 mg/m ³	250 ppm	737 mg/m ³	NL ppm	NL mg/m ³
BHT	TWA	10 mg/m ³		10 mg/m ³			

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: Wear safety glasses with side shields (or goggles) and a face shield.

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

Chemical Name	Flash Point (°C)	Boiling Point (°C)	Solubility in Water	Specific Gravity
Tetrahydrofuran	-21	65.4 @ 760 mmHg	MISCIBLE	0.89

PHYSICAL STATE: Liquid

ODOR: Aromatic odor.

APPEARANCE: Clear, Colorless liquid

COLOR: Colorless

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Trace Technologies Conformal Coating Remover**PERCENT VOLATILE:** 100 at 20°C (68°F)**VAPOR PRESSURE:** 130 mmHg at 20°C**VAPOR DENSITY:** 2.5 (Air=1)**BOILING POINT:** to 65°C (149°F)**FLASHPOINT AND METHOD:** -14.4°C (6°F) TAG CC**SOLUBILITY IN WATER:** Negligible**SPECIFIC GRAVITY:** 0.886 to .891 at 25°C**(VOC):** 886.000 to 891 g/L (non-exempt VOC)**10. STABILITY AND REACTIVITY****STABILITY:** Stable.**POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** Stable. However, may decompose if heated.**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of Carbon (CO and CO₂) may form when heated to decomposition.**INCOMPATIBLE MATERIALS:** Oxidizing agents, alkalies and bases.**11. TOXICOLOGICAL INFORMATION****ACUTE**

Chemical Name	ORAL LD ₅₀ (rat)	INHALATION LC ₅₀ (rat)
Tetrahydrofuran	1650 mg/kg	21000 ppm

EYES: Moderately to severely irritating**DERMAL LD₅₀:** Mildly to moderately irritating.**ORAL LD₅₀:** 2500 mg/kg (rat)**INHALATION LC₅₀:** 21000 ppm, 3-hour**EYE EFFECTS:** Mixture is a moderate eye irritant.**SKIN EFFECTS:** Causes irritation to skin.**CARCINOGENICITY**

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Chemical Name	NTP Status	IARC Status	OSHA Status
Tetrahydrofuran	NOT LISTED	NOT LISTED	NOT LISTED

IARC: NOT listed

NTP: NOT listed

OSHA: NOT listed

REPRODUCTIVE EFFECTS: Not Established

TERATOGENIC EFFECTS: Test results indicate this compound/mixture is not teratogenic.

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: Not regulated

OTHER SHIPPING INFORMATION: Product ships non regulated. See small qty exception, 49CFR 173.4(a)(1).

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Tetrahydrofuran

KEMLER NUMBER: UN2056

HAZARD CLASS: 3

AIR (ICAO/IATA)

SHIPPING NAME: Tetrahydrofuran

UN/NA NUMBER: UN2056

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Trace Technologies Conformal Coating Remover**PRIMARY HAZARD CLASS/DIVISION:** 3**PACKING GROUP:** II**VESSEL (IMO/IMDG)****SHIPPING NAME:** Tetrahydrofuran**UN/NA NUMBER:** UN2056**PRIMARY HAZARD CLASS/DIVISION:** 3**PACKING GROUP:** II**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:** No**313 REPORTABLE INGREDIENTS:** Not considered a SARA 313 "Toxic Chemical".**TITLE III NOTES:** Not listed as an Extremely Hazardous Substance.**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA REGULATORY:** Tetrahydrofuran (CAS# 109-99-9)

Chemical Name	Wt. %	CERCLA RQ
Tetrahydrofuran	> 99	1000 lbs.

CERCLA RQ: 1000 Lbs.**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Tetrahydrofuran	109-99-9

TSCA REGULATORY: This product is listed on 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:** U213**OSHA HAZARD COMM. RULE:** Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

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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.

DOMESTIC SUBSTANCE LIST (INVENTORY): All components of this product are listed on the Canadian DSL.

EUROPEAN COMMUNITY

EEC LABEL SYMBOL AND CLASSIFICATION



"F" - Highly flammable
R11 - Highly flammable.

R19 - May form explosive peroxides.



"T" - Toxic
R23/25 - Toxic by inhalation and if swallowed.



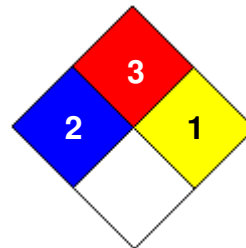
"Xi" - Irritant
R 36/37 - Irritating to eyes and respiratory system

16. OTHER INFORMATION

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

REVISION SUMMARY: Revision #: 8. This MSDS replaces the March 05, 2009 MSDS. Any changes in information are as follows: In Section 14: DOT Proper Shipping Name, DOT Other Shipping Information, Air (IATA /ICAO) - Note

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

GENERAL STATEMENTS: This MSDS was reviewed 5 March 2009.

MANUFACTURER DISCLAIMER: To the best of our knowledge, the information contained herein is

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accurate. However, neither Tech Spray, L.P., or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.