



MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

5250-A Naiman Parkway, Solon, OH 44139 • 888-567-2206 • www.chromate.com

**FOR CHEMICAL
EMERGENCY**

Call ChemTrec day/night:
1-800-424-9300

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: UV SUPER ADHESIVE SEALANT

DATE PREPARED: March 10, 2009

PART NUMBER: 74554 and 74509

CHROMATE INDUSTRIAL CORPORATION

PRODUCT TYPE: ADHESIVE

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SECTION 2 – HAZARDS IDENTIFICATION

PHYSICAL STATE: Liquid

OSHA/HCS STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW: WARNING ! CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER.

Irritating to eyes, respiratory system and skin. Avoid exposure - obtain special instructions before use.

Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Contains material that can cause target organ damage. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

Wash thoroughly after handling.

ROUTES OF ENTRY: Dermal contact. Eye contact. Inhalation.

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation: Irritating to respiratory system.

Ingestion: No known significant effects or critical hazards.

Skin: Irritating to skin.

Eyes: Irritating to eyes.

POTENTIAL CHRONIC HEALTH EFFECTS

Chronic effects: Contains material that can cause target organ damage.

Carcinogenicity: Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Target organs: Contains material which causes damage to the following organs: kidneys, liver, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

OVER-EXPOSURE SIGNS/SYMPTOMS

Inhalation: *Adverse symptoms may include the following:* respiratory tract irritation, coughing.

Ingestion: No specific data.

Skin: *Adverse symptoms may include the following:* irritation, redness.

Eyes: *Adverse symptoms may include the following:* pain or irritation, watering, redness.

MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

N/A — NOT APPLICABLE
N/L — NOT LISTED

N/D — NOT DETERMINED

N/E — NONE ESTABLISHED

N/R — NOT REGULATED

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS NUMBER	%
TETRACHLOROETHYLENE	127-18-4	60-100

There are no ingredients or additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 – FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

SKIN CONTACT: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INHALATION: Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

INGESTION: Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

PROTECTION OF FIRST AID RESPONDERS: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

NOTES TO PHYSICIAN: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5 – FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: In a fire or if heated, a pressure increase will occur and the container may burst.

EXTINGUISHING MEDIA

Suitable: Use an extinguishing agent suitable for the surrounding fire.

Not Suitable: None known.

Special Exposure Hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous Combustion Products: *Decomposition products may include the following materials:*
carbon oxides, halogenated compounds, carbonyl halides

Special Protective Equipment for Fire-Fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

LARGE SPILLS: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Note: see section 1 for emergency contact information and section 13 for waste disposal.

SMALL SPILLS: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

STORAGE: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

PRODUCT NAME	EXPOSURE LIMITS
TETRACHLOROETHYLENE	<p>ACGIH TLV (United States, 1/2006). Notes: Substance identified by other sources as a suspected or confirmed human carcinogen. Substances for which there is a Biological Exposure Index or Indices Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL. Refers to Appendix A -- Carcinogens.</p> <p>STEL: 685 mg/m³ 15 minute(s).</p> <p>STEL: 100 ppm 15 minute(s).</p> <p>TWA: 170 mg/m³ 8 hour(s).</p> <p>TWA: 25 ppm 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). Notes: See Table Z-2.</p> <p>TWA: 170 mg/m³ 8 hour(s).</p> <p>TWA: 25 ppm 8 hour(s).</p> <p>OSHA PEL Z2 (United States, 11/2006).</p> <p>AMP: 300 ppm 5 minute(s).</p> <p>CEIL: 200 ppm</p> <p>TWA: 100 ppm 8 hour(s).</p>

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Recommended Monitoring Procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering Measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

PERSONAL PROTECTION

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Flash Point: N/A

Color: Clear

Odor: N/A

Boiling/Condensation Point: 121.11°C (250°F)

Specific Gravity: 1.3 to 1.36

Vapor Pressure: 1.7 kPa (13 mm Hg)

Estimated Vapor Density: >1 [Air = 1]

VOC %: 0.440669%

To convert % VOC to lbs/gal use the following equation:

Specific Gravity*8.33*VOC%=VOC lbs/gal

Evaporation Rate: <1 (Water = 1)

SECTION 10 – STABILITY AND REACTIVITY DATA

STABILITY: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

CONDITIONS TO AVOID: Avoid exposure - obtain special instructions before use.

MATERIALS TO AVOID: No specific data.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS OF REACTIVITY: Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

SECTION 11 – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
TETRACHLOROETHYLENE	LD Dermal	Rabbit	>3228 mg/kg	-
	LD ₅₀	Rat	4678 mg/kg	-
	Intraperitoneal			
	LD ₅₀ Oral	Rat	2629 mg/kg	-
	LD ₅₀ Unreported	Rat	4000 mg/kg	-
	LD _{Lo} Intratracheal	Rat	450 mg/kg	-
	LD _{Lo} Oral	Rat	50 mg/kg	-

CARCINOGENICITY CLASSIFICATION

PRODUCT/INGREDIENT NAME	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
TETRACHLOROETHYLENE	A3	2A	-	+	Possible	-

IDLH: N/A

SYNERGISTIC PRODUCTS: N/A

SECTION 12 – ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS : No known significant effects or critical hazards.

AQUATIC ECOTOXICITY

PRODUCT/INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
TETRACHLOROETHYLENE	Intoxication	Acute EC ₅₀ 14.4 mg/L	Fish	48 hours
	Intoxication	Acute EC ₅₀ 8.5 mg/L	Daphnia	48 hours
	Intoxication	Acute EC ₅₀ 7.5 mg/L	Daphnia	48 hours
	Mortality	Acute LC ₅₀ 5.78 mg/L	Fish	96 hours
	Mortality	Acute LC ₅₀ 4.99 mg/L	Fish	96 hours
	Mortality	Acute LC ₅₀ 4.82 mg/L	Fish	96 hours

Conclusion/Summary: N/A

BIODEGRADABILITY

Conclusion/Summary: N/A

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. *Disposal should be in accordance with applicable regional, national and local laws and regulations.*

Refer to **SECTION 7: HANDLING AND STORAGE** and **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION** for additional handling information and protection of employees.

SECTION 14 – TRANSPORT INFORMATION

REGULATORY INFORMATION	UN NUMBER	PROPER SHIPPING NAME	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
DOT Classification	1897	Tetrachloroethylene mixture Marine pollutant (Tetrachloroethylene)	6.1	III	Poison: 6	Marine pollutant: Marine pollutant (P) Limited quantity: Yes. Packaging Instruction: <i>Passenger aircraft</i> Quantity limitation: 60 L <i>Cargo aircraft</i> Quantity limitation: 220 Special Provisions: < 1 gal Consumer commodity ORM-D
TDG Classification	1897	Tetrachloroethylene mixture Marine pollutant	6.1	III	Poison: 6	Marine Pollutant: Marine pollutant (P) Explosive Limit and Limited Quantity Index: 5 Passenger Carrying Ship Index: 60
IMDG Class	1897	Tetrachloroethylene mixture Marine pollutant (Tetrachloroethylene)	6.1	III	Poison: 6	Emergency Schedules (EmS): F-A, S-A Marine Pollutant: Marine pollutant (P)
IATA-DGR Class	1897	Tetrachloroethylene mixture	6.1	III	Poison: 6	Passenger and Cargo Aircraft: Quantity limitation: 60 L Cargo Aircraft Only Quantity limitation: 220 L Limited Quantities - Passenger Aircraft Quantity limitation: 2 L

SECTION 15 – REGULATORY INFORMATION

UNITED STATES INVENTORY (TSCA 8B): All components are listed or exempted.

SARA 311/312: ACUTE, CHRONIC

SARA 313:

PRODUCT NAME	CAS NUMBER	CONCENTRATION
FORM R - REPORTING REQUIREMENTS	TETRACHLOROETHYLENE 127-18-4	60-100

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

CALIFORNIA NO. 65: *WARNING:* This product contains a chemical known to the State of California to cause cancer.

INGREDIENT NAME	CANCER	REPRODUCTIVE
TETRACHLOROETHYLENE	Yes	No

CANADA

- WHMIS (CANADA)** **CLASS D-1B:** Material causing immediate and serious toxic effects (Toxic).
 CLASS D-2A: Material causing other toxic effects (Very toxic).
- CANADIAN LISTS** **CEPA Toxic substances:** *The following components are listed:* Tetrachloroethylene
- CANADIAN NPRI:** *The following components are listed:* Tetrachloroethylene
- CANADA INVENTORY** **CANADA INVENTORY:** All components are listed or exempted.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

MEXICO

CLASSIFICATION: **HEALTH: 3** **FLAMMABILITY: 0** **REACTIVITY: 1** **SPECIAL: —**

EU REGULATIONS:

HAZARD SYMBOL OR SYMBOLS: *HARMFUL, DANGEROUS FOR THE ENVIRONMENT*

RISK PHRASES: R40- Limited evidence of a carcinogenic effect.
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES: S2- Keep out of the reach of children.
 S29- Do not empty into drains.
 S36/37- Wear suitable protective clothing and gloves.
 S46- If swallowed, seek medical advice immediately and show this container or label.
 S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

INTERNATIONAL REGULATIONS

- INTERNATIONAL LISTS**
- AUSTRALIA INVENTORY (AICS):** N/D
- CHINA INVENTORY (IECSC):** N/D
- KOREA INVENTORY (KECI):** N/D
- PHILIPPINES INVENTORY (PICCS):** N/D
- JAPAN INVENTORY (ENCS):** N/D

SECTION 16 – OTHER INFORMATION

HMIS RATING: HEALTH: 3

FLAMMABILITY: 0

REACTIVITY: 1

NFPA RATING: HEALTH: 3

FLAMMABILITY: 0

REACTIVITY: 1

SPECIAL: —

CAUTION: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

THE CUSTOMER IS RESPONSIBLE FOR DETERMINING THE PPE CODE FOR THIS MATERIAL.

NOTICE TO READER

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