



MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

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**FOR CHEMICAL
EMERGENCY**

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SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CONTACT CLEANER PS

DATE PREPARED: APRIL 7, 2009

PART NUMBER: 74704

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PRODUCT TYPE: NON-FLAMMABLE INDUSTRIAL STRENGTH
CONTACT CLEANER FORMULATION

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PRODUCT DESCRIPTION: Aerosol application. Fast drying, non-flammable, no-residue, very safe on most plastics, but is NOT recommended applied to stressed polycarbonate. Cleans and degreases; removes oils, greases, silicones, dirt and grime from printed circuit boards, business machines, medical equipment, data processing equipment and more.

RESTRICTIONS: Commercial use only. Contains HCFC-225.

SECTION 2 – HAZARDOUS INGREDIENTS

INGREDIENT NAMES	CAS #	OCCUPATIONAL EXPOSURE LIMITS		
		TLV OR PEL	ORAL LD ₅₀	COMPOSITION
1-3-DICHLORO- 1,1,2,2,3-PENTAFLUOROPROPANE	507-55-1	50 ppm AEL (See below*)	5 gm/kg (rat)	3.0%
3,3-DICHLORO- 1,1,1,2,2-PENTAFLUOROPROPANE	422-56-0	50 ppm AEL (See below*)	5 gm/kg (rat)	27.0%
1,1,1,3,3-PENTAFLUOROBUTANE	406-58-6	5000 ppm	2,000 gm/kg (rat)	30.0%
1,1,1,2-TETRAFLUROETHANE	811-97-2	1000 ppm	N/E	30.0%
ISOPROPYL ALCOHOL	67-63-0	400 ppm	N/E	10.0%

*Recommended Acceptable Exposure Limits are 50 ppm for 8 hour exposures, EEL recommended exposure limitation is 1,000 ppm threshold for 15 minutes, and 2,000 ppm threshold for 1 minute exposures (EEL) 8-hour.

CARCINOGENIC: OSHA: NO NTP: NO IARC: NO

SECTION 3 – PHYSICAL DATA

APPEARANCE: Transparent, colorless liquid

ODOR: Slight ethereal odor

BOILING POINT: 90°F - 131°F (40°C - 54°C)

VAPOR DENSITY (AIR = 1): >1

VAPOR PRESSURE: 1551 mmHg (30 psig)

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY: 1.305

EVAPORATION RATE (ETHER = 1): >1

N/A — NOT APPLICABLE

N/D — NOT DETERMINED

N/E — NONE ESTABLISHED

N/R — NOT REGULATED

N/L — NOT LISTED

SECTION 4 – FIRE AND EXPLOSION DATA

HMIS RATING: HEALTH: 2 FIRE: 1 REACTIVITY: 1

FLASH POINT: None to initial boiling point 90°F (40°C).

FLAMMABLE LIMITS: LEL: N/E UEL: N/E

EXTINGUISHING MEDIA: Foam, Dry chemical, CO₂

UNUSUAL FIRE AND EXPLOSION HAZARDS: The solvent blend of this formulation thermally decomposes to produce irritating, toxic and corrosive gases under fire conditions. Heated containers may rapidly over-pressurized to fail explosively.

SPECIAL FIRE-FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus and protective clothing. Cool fire-exposed containers with water fog. Disperse gas vapors with water spray.

ADDITIONAL INFORMATION: Dielectric Constant (1MHz, 25C): 4.14
Dielectric Breakdown: 43 kV, according to ASTM D-877
The above data are typical values and do not constitute a specification.

SECTION 5 – HEALTH HAZARD DATA**EMERGENCY AND FIRST AID PROCEDURES:**

Eye Contact: Flush eyes with water for at least 15 minutes. Consult a physician.

Skin Contact: Wash affected area with soap and water. If irritation develops or persists, consult a physician.

Inhalation: Remove victim to fresh air, administer oxygen if necessary. If victim has stopped breathing, begin CPR and get immediate medical attention.

Ingestion: If liquid is swallowed, consult physician immediately. *DO NOT INDUCE VOMITING UNLESS PHYSICIAN DIRECTED.*
If spontaneous vomiting occurs. Keep victim's head below hips to prevent aspiration of vomitus into lungs.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

EXPOSURE: Pre-existing cardiovascular disease and skin conditions.

PRIMARY ROUTES OF ENTRY: Inhalation, skin and eye contact.

HEALTH HAZARDS (ACUTE AND CHRONIC)/ EFFECTS OF OVEREXPOSURE: Excessive inhalation of high vapor concentrations may cause dizziness, weakness, fatigue, nausea, headache, unconsciousness. Extreme inhalation overexposures may cause death via asphyxiation.

SECTION 6 – REACTIVITY DATA

STABILITY: Stable under normal use and storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS (UNDER FIRE CONDITIONS): Hydrochloric and hydrofluoric acids, possible carbonyl halides such as phosgene and oxides of carbon.

INCOMPATIBILITY: Avoid contact with strong acids, alkalis, reactive metals, sodium, calcium, magnesium, zinc, lithium shavings, etc.
Avoid also strong oxidizing agents.

CONDITIONS TO AVOID: Avoid contact with heat, flame, high-intensity heat sources.

SECTION 7 – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Extinguish potential ignition sources, ventilate area. Take up spilled material on an inert, absorbent material and place into a closed-top DOT-approved waste container for disposal. Prevent spilled liquid from entering sewers or drains.

WASTE DISPOSAL: Comply with all existing Federal, State and Local environment regulations. Waste or unwanted material may be reclaimed or incinerated by federally permitted facilities.

SECTION 8 – SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Mechanical (general) ventilation for standard manufacturing procedures is usually adequate. If TLVs or PELs are exceeded and when this compound is used in poorly ventilated or oxygen-deficient atmospheres, user should wear a NIOSH-approved organic respirator for organic vapors or a positive pressure, air-supplied respirator. Do not exceed respirator manufacturer's prescribed equipment limitations.

PROTECTIVE GLOVES: Impervious PVA or neoprene gloves.

EYE PROTECTION: Safety glasses, splash goggles, face shield.

OTHER PROTECTIVE EQUIPMENT: Eye wash station is ideally stationed near point of use.

SECTION 9 – SPECIAL PRECAUTIONS AND STORAGE DATA

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid eye and continued, prolonged skin contact with this compound. Avoid excessive inhalation of its vapors. Use only in well-ventilated environments. Intentional inhalation of contents is harmful and may be fatal.

PRECAUTIONS TO BE TAKEN IN STORING: Store containers below 120°F (48°C), away from heat, open flame, or other ignition sources. Keep aerosols out of direct sunlight.

SECTION 10 – SHIPPING DATA

DOT SHIPPING NAME: Aerosols, Non-flammable (each not exceeding 1L capacity)

UN/ NA NUMBER: UN 1950

DOT HAZARD CLASS: 2.2

DOT REQUIRED LABEL: 2, Non-flammable gas (air shipment only)

DOT EXCEPTION: See code 49 section 172.101, column (8A). Section 173.306(h) permits "limited quantity" materials (inner packages which do not exceed 1L capacity / 61 cubic inches and for which internal pressures do not exceed 180 psig at 130°F) meeting section 171.8 definition of "consumer commodity" to be renamed "Consumer commodity" and re-classed ORM-D when shipped via ground mode, domestically.

IMDG SHIPPING NAME: Aerosols, Non-flammable (each less than 1L capacity)

FREIGHT CLASS: NMFC 48580, SUB 3

LTL: 55

TL: 35

MW: 36

TSCA STATUS: All components listed.

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