



# 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:** RED LION CONTACT CLEANER PS

**DATE PREPARED:** April 7, 2009

**PART NUMBER:** 74704

**DATE REVISED:** January 29, 2010

**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 LD50	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

**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, CO<sub>2</sub>

**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.

**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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