



MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

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**FOR CHEMICAL
EMERGENCY**

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

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SOLDER GUARD
PART NUMBER: 66370
PRODUCT TYPE: HEAT & FLAME BARRIER

DATE PREPARED: NOVEMBER 12, 2009
CHROMATE INDUSTRIAL CORPORATION
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SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

See the table below for product ingredients, CAS numbers, exposure limits and Section 313 Reporting. See Section 9, "Regulatory Data" for California Proposition 65 information:

INGREDIENTS PRESENT IN PRODUCT:

INGREDIENTS	CAS #	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)	SECTION 313 REPORTING	% (OPTIONAL)
VITREOUS ALUMINOSILICATE	142844-00-6	15 (AS TOTAL)	N/E	N/A	N/D
ALUMINUM	7429-90-5	15 (AS TOTAL)	10	N/A	N/D

SECTION 3 – HAZARDS IDENTIFICATION

WARNING! POSSIBLE CANCER HAZARD BY INHALATION.

Although studies involving occupationally exposed workers have not identified any increased incidence of respiratory disease, results from animal testing have been used as the basis for hazard classification. In each of the following cases, the conclusions are qualitative only, and do not rest upon any quantitative analysis suggesting that the hazard actually may occur at the current occupational exposure levels. There has been no increased incidence of respiratory disease in studies examining occupationally exposed workers. In animal studies, long term laboratory exposure to doses hundreds of times higher than normal occupational exposures has produced fibrosis, lung cancer and mesothelioma in rats or hamsters. The fibers used in those studies were specially sized to maximize rodent respirability.

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) confirmed in October, 2001, that Group 2B (possible human carcinogen based on sufficient evidence of carcinogenicity in animals but inadequate evidence in humans) continues to be the appropriate classification for refractory ceramic fiber (RCF.)

The Seventh Annual Report on Carcinogens (1994), prepared by the **NATIONAL TOXICOLOGY PROGRAM (NTP)**, classified respirable RCF and glass wool as substances reasonably anticipated to be carcinogens.

The **AMERICAN CONFERENCE OF GOVERNMENT INDUSTRIAL HYGIENISTS (ACGIH)** has classified RCF as "A2-Suspected Human Carcinogen."

The **COMMISSION OF THE EUROPEAN COMMUNITIES (DG XI)** has classified RCF as a substance "that should be regarded as if it is a carcinogenic to man."

The **STATE OF CALIFORNIA**, pursuant to **Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986**, has listed "ceramic fibers (airborne fibers of respirable size)" as a chemical known to the State of California to cause cancer.

The **CANADIAN ENVIRONMENTAL PROTECTION AGENCY (CEPA)** has classified RCF as "probably carcinogenic" (Group 2).

The **CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)**: RCF is classified as Class D2A-Materials Causing Other Toxic Effects.

THIS PRODUCT, USED AS INTENDED, MAY CAUSE TEMPORARY MILD IRRITATION TO SENSITIVE SKIN. PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE.

N/A — NOT APPLICABLE

N/D — NOT DETERMINED

N/E — NONE ESTABLISHED

N/R — NOT REGULATED

N/L — NOT LISTED

SECTION 4 – PHYSICAL / CHEMICAL CHARACTERISTICS

THIS PRODUCT AS SHIPPED IS NON-HAZARDOUS, NON-FLAMMABLE, NON-EXPLOSIVE AND NON-REACTIVE.

NFPA RATING, CODE 704: HEALTH: 1* FLAMMABILITY: 0 REACTIVITY: 0

* denotes potential for chronic effects

BOILING POINT (°F):	N/A	SPECIFIC GRAVITY(H ₂ O = 1):	N/E
VAPOR PRESSURE (mm Hg):	N/A	MELTING POINT:	1760°C (3200°F)
VAPOR DENSITY (AIR = 1):	N/A	EVAPORATION RATE (H ₂ O = 1):	N/A
SOLUBILITY IN WATER:	NOT SOLUBLE IN WATER	pH:	N/A

APPEARANCE AND ODOR: White, odorless, light density fibrous batting with thin metallic backing.

SECTION 5 – FIRE AND EXPLOSION HAZARD DATA

NON-FLAMMABLE: Fuel gas torches and soldering irons used for welding, brazing and soldering operations and welding arcs and sparks can ignite combustibles. Refer to American National Standard Z49.1 for fire prevention during welding.

EXTINGUISHING MEDIA: Product is non-flammable. Extinguishing media is dependant on fire type.

SPECIAL FIRE-FIGHTING PROCEDURES: None.

UNUSUAL FIRE & EXPLOSION HAZARDS: None.

SECTION 6 – REACTIVITY DATA / HAZARD DECOMPOSITION PRODUCTS

INCOMPATIBILITY: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Trace amounts of cristobalite, a form of respirable silica may be formed when **SOLDER GUARD** is used as temperatures above 1800°F for extended periods of time.
 TLV for cristobalite (CAS 14464-46-1) = 0.05 mg/m³(ACGIH.)
 See Section 9, "REGULATORY DATA" for information on respirable silica.
 One recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample inside the welder's helmet, if worn, or in the worker's breathing zone. See ANSI/AWS F1.1, available from the American Welding Society, PO Box 351040 Miami, FL, 33135.

SECTION 7 – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section 2 for TLV's for ingredients of this product. The ACGIH recommended general limit for welding fume NOC (Not otherwise classified) is 5 mg/m³. The ACGIH 1984-85 preface states, "*The TLV-TWA should be used as guides in the control of health hazards and should not be used as firm lines between safe and dangerous concentrations.*" See Section 6 for specific fume constituents, which may modify this TLV.

EFFECTS OF OVEREXPOSURE: FUMES AND GASES generated during use of this product, in conjunction with heating, welding, brazing or soldering procedures, can be dangerous to your health. Aggravation of pre-existing respiratory or allergic conditions may occur in some workers.

SHORT-TERM (ACUTE) OVEREXPOSURE: May cause minor skin irritation /dryness.

LONG-TERM (CHRONIC) OVEREXPOSURE: Nuisance dust from products may cause benign or inert pneumoconiosis or cough.

ARC RAYS: Can injure eyes and burn skin.

ELECTRIC SHOCK: Can kill. See Section 8.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: May aggravate skin and respiratory problems.

ACUTE/CHRONIC HEALTH EFFECTS & EFFECTS OF OVER-EXPOSURE

Inhalation: Contact with fumes or free fibers may cause temporary upper respiratory irritation.

Skin Contact: Contact with free fibers may cause temporary irritation.

Eye Contact: Contact with free fibers may cause temporary irritation.

Ingestion: Not normal route of entry. *DO NOT INGEST.*

FIRST AID / MEDICAL INFORMATION

Inhalation: Remove from area of exposure to location with fresh air.

Skin Contact: Wash effected areas with soap and water. Apply suitable skin lotion.

Eye Contact: Flush eyes with water for at least 15 minutes. *SEEK MEDICAL AID.*

Ingestion: *DO NOT INDUCE VOMITING. SEEK MEDICAL ADVICE.*

EMERGENCY & FIRST AID PROCEDURES: CALL FOR MEDICAL AID.

EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

SECTION 8 – PRECAUTIONS FOR SAFE HANDLING & USE / APPLICABLE CONTROL MEASURES

READ AND UNDERSTAND THE MANUFACTURER’S INSTRUCTIONS AND THE PRECAUTIONARY LABEL ON THIS PRODUCT.

STORAGE AND HANDLING: Store in provided product container in a dry place to maintain product quality. Avoid contact with eyes, skin or clothing. Limit the use of power tools, unless in conjunction with local exhaust. Use good housekeeping practices to prevent accumulation of dust or fumes. Wash hands after handling.
DO NOT SMOKE, EAT OR DRINK IN AREA. DO NOT USE COMPRESSED AIR FOR CLEAN-UP.

VENTILATION: Trace amounts may burn off during exposure to high heat. Use enough ventilation, local exhaust at work area, or both to keep the dust, fumes and gases below the TLV’s in the worker’s breathing zone and the general area. Train the worker to keep his/her head out of the fumes.

RESPIRATORY PROTECTION: Use NIOSH-approved dust respirator or air supplied respirator when using product in confined space or when welding, brazing or soldering in confined space or where local exhaust or ventilation does not keep exposure below TLV.

EYE PROTECTION: Use of safety glasses or goggles recommended when using this product to prevent particles getting into the eyes. Use proper protection if welding, brazing or soldering. Provide protective screens and flash goggles, if necessary, to shield others. When working with chemicals or polymer products, a safety eyewash station should be in close proximity.

PROTECTIVE CLOTHING: Use gloves and aprons to avoid prolonged or repeated skin contact with chemicals and to protect clothing. When using product in conjunction with welding, brazing or soldering operation, wear head, hand and body protection which help prevent injury from radiation, sparks, heat and electrical shock. See ANSI Z49.1. At a minimum, this includes gloves and protective face shield and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing. Train the worker not to touch hot metals or live electrical parts and to insulate himself from work and ground.

PROCEDURE FOR CLEAN-UP OF SPILLS OR LEAKS: Avoid creating airborne dust. Use dust suppressing cleaning methods such as wet sweeping or vacuuming should be used to clean the work area. If vacuuming, the vacuum should be equipped with HEPA filter. Compressed air or dry sweeping should **NOT** be used for cleaning.

WASTE DISPOSAL METHOD: Prevent waste from contaminating surrounding environment. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with Federal, State and Local Regulations.

SECTION 9 – REGULATORY DATA

TSCA: No listed components
OSHA: Not regulated

CERCLA: No reportable ingredients
RCRA: No reportable ingredients

SARA TITLE III

SECTION 302: No reportable ingredients
SECTION 312: No reportable ingredients

SECTION 311: No reportable ingredients
SECTION 313: No reportable ingredients

CALIFORNIA: PURSUANT TO PROPOSITION 65

WARNING! SOLDER GUARD contains vitreous ceramic fiber material that does not contain crystalline silica, however, continued exposure to elevated temperatures over 1800°F may cause these fibers to de-vitrify and form trace amounts of cristobalite, a form of respirable silica. The extent of which this material is formed is dependant on duration and temperature. Free respirable silica has been listed as a suspected human carcinogen by NTP and IARC. Prolonged exposure and repeated inhalation of free respirable silica may lead to silicosis or other serious delayed lung injury. Ceramic fibers (airborne particles of respirable size) is listed in Proposition 65. The SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT of 1986 as a chemical known to the State of California to cause cancer. (California Health & Safety Code 25249.5 et Seq.)

SECTION 10 – ECOLOGICAL DATA

Mineral components are inert and may be introduced into the environment without consequence.

SECTION 11 – PREPARATION INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

Vendor assumes no responsibility for injury to vendee or third persons proximately cause by material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of this material even if reasonable safety procedures were followed. Furthermore, vendee assumes the risks in his use of the material.

SECTION 12 – DEFINITIONS

ACGIH	American Council of Governmental Industrial Hygienists
ANSI	American National Standards Institute
AWS	American Welding Society
CAS	Chemical Abstracts Service
CEPA	Canadian Environmental Protection Agency
CERCLA	Comprehensive Environmental Responses, Compensation and Liability Act
DG XI	Commission of the European Communities
DOT	Department of Transportation
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
mg/m³	Milligrams per Cubic Meter of Air
MSDS	Material Safety Data Sheet
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit (OSHA)
RCF	Refractory Ceramic Fiber
RCRA	Resource Conservation and Recovery Act
SARA Section 311	MSDS/List of Chemicals Hazardous Inventory
SARA Section 312	Emergency and Hazardous Inventory
SARA Section 313	Toxic Chemicals and Release Reporting
TLV	Threshold Limit Value (ACGIH)
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Canadian Workplace Hazardous Materials Information System