

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: RED LION SOLDER LINK FLUX

DATE PREPARED: OCTOBER 24, 2008

PART NUMBER: 74518

PRODUCT TYPE: Soldering Flux CHEM. FAMILY: Butane/Succinic Acid/ **CHROMATE INDUSTRIAL CORPORATION**

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SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

DANGEROUS COMPONENTS:

124-04-9 adipic acid ≤ 2.5% succinic acid 110-15-6 ≤ 2.5% 107-88-0 butane-1.3-diol 2.5-10%

SECTION 3 – HAZARDS INDENTIFICATION

INFORMATION PERTAINING TO PARTICULAR DANGERS FOR MAN/ENVIRONMENT: The product does not have to be labeled due to the calculation procedure of international guidelines.

Health: 1 Reactivity: 0 NFPA ratings (scale 0 - 4): Fire: 0 HMIS-ratings (scale 0 - 4): Health: 1 Fire: 0 Reactivity: 0

SECTION 4 – FIRST AID MEASURES

After Inhalation: Supply fresh air; consult doctor in case of complaints.

After Skin Contact: Immediately wash with water and soap and rinse thoroughly. After Eye Contact: Rinse opened eye for several minutes under running water. After Swallowing: Induce vomiting, if person is conscious. Seek medical help.

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING AGENTS: CO₂, extinguishing powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

SPECIAL HAZARDS CAUSED BY THE MATERIAL, ITS PRODUCTS OF COMBUSTION OR RESULTING GASES:

In case of fire, the following can be released:

Carbon monoxide (CO) Carbon dioxide (CO₂)

PROTECTIVE EQUIPMENT: Wear self-contained respiratory protective device.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSON-RELATED SAFETY PRECAUTIONS: Wear protective equipment. Keep unprotected persons away. MEASURES FOR ENVIRONMENTAL PROTECTION: Do not allow to enter sewers/ surface or ground water.

MEASURES FOR CLEANING/COLLECTING: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E - NONE ESTABLISHED N/L - NOT LISTED REV 10/24/2008 BJM Page 1 of 4

SECTION 7 – HANDLING AND STORAGE

HANDLING:

Information for Safe Handling: No special measures required.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSIONS AND FIRES: No special measures required.

STORAGE:

Requirements to be Met by Storerooms and Receptacles: No special requirements. INFORMATION ABOUT STORAGE IN ONE COMMON STORAGE FACILITY: Not required.

FURTHER INFORMATION ABOUT STORAGE CONDITIONS: Store in cool, dry conditions in well sealed receptacles. Protect from frost.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional Information About Design of Technical Systems: No further data; see item 7.

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

124-04-9 TLV 5 mg/m³ Adipic Acid

ADDITIONAL INFORMATION:

PEL: Permissible Exposure Limit (OSHA) REL: Recommended Exposure Limit (NIOSH)

TLV: Threshold Limit Value (ACGIH)

OSHA: Occupational Safety and Health Administration

ACGIH: American Conference of Governmental Industrial Hygienists NIOSH: National Institute for Occupational Safety and Health

PERSONAL PROTECTIVE EQUIPMENT:

General Protective and Hygienic Measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of

work. Store protective clothing separately. Avoid contact with the eyes and skin.

Breathing Equipment: When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or

self-contained breathing apparatus (SCUBA) should be worn.

Protection of Hands: Protective gloves

Material of Gloves: Nitrile rubber, NBR, Natural rubber, NR

Penetration Time of Glove Material: The exact break through time has to be found out by the manufacturer of the protective gloves and

has to be observed.

Eye Protection: Tightly sealed goggles; Safety glasses.

SECTION 9 - PHYSICAL/CHEMICAL CHARACTERISTICS

GENERAL INFORMATION:

Form: Liquid Color: Colorless Odor: Mild

CHANGE IN CONDITION:

Melting Point/Melting Range: 0°C (32°F) Boiling Point/Boiling Range: 100°C (212°F)

Flash Point: N/A

Danger of Explosion: Product does not present an explosion hazard.

Vapor Pressure at 20°C (68°F): 19 mmHg Density at 20°C (68°F): 1.010 g/cm³

Solubility in / Miscibility with Water: Fully miscible.

pH-value at 20°C (68°F): 3.3

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED REV 10/24/2008 BJM

SECTION 10 – STABILITY AND REACTIVITY

THERMAL DECOMPOSITION / CONDITIONS TO BE AVOIDED: No decomposition if used according to specifications.

MATERIALS TO BE AVOIDED: Strong acids, strong oxidizers. **DANGEROUS REACTIONS:** No dangerous reactions known.

DANGEROUS PRODUCTS OF DECOMPOSITION: Carbon monoxide and carbon dioxide

SECTION 11 – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Primary irritant effect:

On the Skin: Possible local irritation by contact with flux or fumes.

On the Eye: Smoke during soldering can cause eye irritation.

Through Inhalation: May cause respiratory irritation.

Through Ingestion: May cause gastrointestinal irritation.

Sensitization: No sensitizing effects known.

SECTION 12 - ECOLOGICAL INFORMATION

GENERAL NOTES: Do not allow product to reach ground water, water course or sewage system.

SECTION 13 - DISPOSAL CONSIDERATIONS

Product:

Recommendation: Disposal must be made according to official regulations. Must not be disposed of together with household garbage.

Do not allow product to reach sewage system.

Uncleaned Packagings:

Recommendation: Disposal must be made according to official regulations.

SECTION 14 – TRANSPORT INFORMATION

DOT REGULATIONS:

Hazard class: -

Not regulated.

LAND TRANSPORT ADR/RID (CROSS-BORDER):

ADR/RID class: -

Not regulated.

MARITIME TRANSPORT IMDG:

IMDG Class: -

Not regulated.

Marine Pollutant: No

AIR TRANSPORT ICAO-TI AND IATA-DGR:

ICAO/IATA Class: -

Not regulated.

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L — NOT LISTED

SECTION 15 - REGULATORY INFORMATION

USA THE FOLLOWING INFORMATION RELATES TO PRODUCT REGULATION SPECIFIC TO THE USA.

SARA (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES): None of the ingredient is listed. SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS): None of the ingredients is listed.

TSCA (TOXIC SUBSTANCES CONTROL ACT): All ingredients are listed.

CALIFORNIA PROPOSITION 65

Chemicals Known to Cause Cancer: None of the ingredients is listed.

Chemicals Known to Cause Reproductive Toxicity: None of the ingredients is listed.

CARCINOGENICITY CATEGORIES

EPA (Environmental Protection Agency): None of the ingredients is listed.

IARC (International Agency for Research on Cancer): None of the ingredients is listed.

NTP (National Toxicology Program): None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed.

CANADA: The following information relates to product regulation specific to Canada.

Workplace Hazardous Materials Identification (WHMIS):

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16 – OTHER INFORMATION

The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Chromate Industrial Corporation extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. The data on this Material Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Material Safety Data Sheet as a source for hazard information.

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