RED LION RESEARCH

SAFFTY DATA SHFFT

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

1. IDENTIFICATION

PRODUCT NAME: Red Lion Cutting Oil III DATE PREPARED: June 10, 2015

PART NUMBER: 74172 MANUFACTURER: CHROMATE INDUSTRIAL CORPORATION 5250-A Naiman Parkway, Solon, OH 44139 • www.chromate.com

RECOMMENDED USE: Coating. EMERGENCY TELEPHONE NUMBER OF THE COMPANY: (888) 567-2206

RECOMMENDED RESTRICTIONS: None known.

PRODUCT INFORMATION TELEPHONE NUMBER: (888) 567-2206

REGULATORY INFORMATION TELEPHONE NUMBER: (888) 567-2206

TRANSPORTATION EMERGENCY TELEPHONE NUMBER: (800) 424-9300

NATIONAL POISON CENTER: (800) 222-1222

2. HAZARDS IDENTIFICATION

Physical hazards: Flammable aerosols - Category 1.

Health hazards:Not classified.Environmental hazards:Not classified.OSHA definied hazards:Not classified.

Label elements:



Signal word: Danger

Hazard statements: Extremely flammable aerosol.

Precautionary statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an

open flame or other ignition source. Pressurized container: Do not peirce or burn, even

after use.

Response: Wash hands after handling.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): Static accumulating flammable liquid can become electrostatically charged even in bonded

and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or

explosion.

Supplemental information: None.

 ${\sf N/A-NOT\,APPLICABLE} \qquad {\sf N/D-NOT\,DETERMINED} \qquad {\sf N/E-NONE\,ESTABLISHED} \qquad {\sf N/R-NOT\,REGULATED} \qquad {\sf N/L-NOT\,LISTED}$

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Isobutane		75-28-5	2.5 - 10
Propane		74-98-6	2.5 - 10
Other components below reportable levels			80 - 90

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4 FIRST-AID MEASURES

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Rinse with water. Get medical attention if irritation develops and persists.

In the unlikely event of swallowing contact a physician or poison control center.

Most important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. **General information:** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be

used for small fires only.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grouded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on

surface of water.

Special protective equipment and

precautions for firefighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face

shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/

instructions:

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or

holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials. Move

containers from fire area if you can do so without risk. In the event of fire and/or explosion do not

breath fumes.

General fire hazards: Extremely flammable aerosol.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Remove all possible sources of ignition in the surrounding area. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up:

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small spills: Wipe up with absorbant material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions:

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contaminaton.

7. HANDLING AND STORAGE

Precautions for safe handling:

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

Conditions for safe storage, including any incompatibilities:

Level 1 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures above 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat, or other sources of ignition. This material can accumulate static charge which may cause spark and become ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED N/L - NOT LISTED REV 06/10/2015 LC

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1920.1000)

 Components
 Type
 Value

 Propane (CAS 74-98-6)
 PEL
 1800 mg/m³

 1000 ppm
 1000 ppm

US. ACGIH Threshold Limit Values

 Components
 Type
 Value

 Isobutane (CAS 75-28-5)
 STEL
 1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

 Components
 Type
 Value

 Isobutane (CAS 75-28-5)
 TWA
 1900 mg/m³ 800 ppm

 Propane (CAS 74-98-6)
 TWA
 1800 mg/m³ 1000 ppm

Biological limit values: No biological exposure limits noted for the ingredients(s).

Appropriate engineering controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventiliation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Hand protection: Wear appropriate chemical resistant gloves.

Skin protection

Other: Wear suitable protective clothing.

Respiratory protection: If permissible levels are exceeded use NIOSH mechanical filter/organic vapor cartridge or an air-supplied

respirator.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state: Liquid. Form: Aerosol. Color: Not available. Odor: Not available. Odor threshold: Not available. pH: Not available. Not available. Melting point/freezing point: Initial boiling point and boiling range: Not available.

Flash point: -155.2°F (-104.0°C) Propellant estimated.

Evaporation rate: Not available.
Flammability (solid, gas) Not available.

Lower and upper flammability or explosive limits

Flammability limit - lower (%)

Flammability limit - upper (%)

Explosive limit - lower (%)

Explosive limit - upper (%)

Not available.

Vapor pressure:

Vapor density:

Relative density:

1.8% estimated.

9.5% estimated.

Not available.

Not available.

Not available.

Not available.

Solubility(ies)

Solubility (water)

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Not available.

Not available.

Viscosity:

Not available.

Other information

Heat of combustion (NFPA 30B)5.45 kJ/g estimated.Specific gravity0.072 estimated.

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Ingestion: Expected to be a low ingestion hazard.

Inhalation: No adverse effects due to inhalation are expected.Skin contact: No adverse effects due to skin contact are expected.Eye contact: Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components Species Test Results

Isobutane (CAS 75-28-5)

Acute Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52%, 120 Minutes

Rat 1355 mg/l

Propane (CAS 74-98-6)

Acute Inhalation

LC50 Mouse 1237 mg/l, 120 Minutes

52%, 120 Minutes

Rat 1355 mg/l

658 mg/l/4h

Skin corrosion/irritation:Prolonged skin contact may cause temporary irritation.Serious eye damage/eye irritation:Direct contact with eyes may cause temporary irritation.

Resiratory or skin sensitization

Respiratory sensitization: Not available.

Skin sensitization: This product is not expected to cause skin sensitization.

Germ cell mutagenicity:No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogencity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard: Not available.

^{*}Estimates for product may be based on additional component data not shown.

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available.

Partition coefficient n-octanol/water (log Kow)

 Isobutane
 2.76

 Propane
 2.36

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues/unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

UN number UN1950

UN proper shipping name Aerosols, flammable, (each not exceeding 1 L capacity)

Transport hazard class(es)

Class 2.1
Subsidiary risk Label(s) 2.1

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisionsN82Packaging exceptions306Packaging non bulkNone.Packaging bulkNone.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

14. TRANSPORT INFORMATION

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Environmental hazards No. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.
Packaging exceptions LTD QTY

IMDG

UN number UN1950 UN proper shipping name Aerosols

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

Environmental hazards

 $\label{eq:main_model} \begin{tabular}{ll} Marine pollutant & No. \\ \begin{tabular}{ll} EmS & F-D, S-U \end{tabular}$

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY

Transport in bulk according to Annex II of Not applicable.

MARPOL 73/78 and the IBC Code

DOT IATA; IMDG





15. REGULATORY INFORMATION

U.S. Federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

SARA 304 Emergency release notification: Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

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15. REGULATORY INFORMATION CONTINUED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance: Not listed.

SARA 311/312 hazardous chemical: No. SARA 313 (TRI reporting): Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA): Not regulated.

US State Regulations

US. Massachusetts RTK - Substance List

Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

Isobutane (CAS 75-28-5)
Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. Rhode Island RTK

Isobutane (CAS 75-28-5) Propane (CAS 74-98-6)

US. California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commerical Chemical	No
	Substances (EINECS)	
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicated that all components of this product comply with the inventory requirements administed by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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16. OTHER INFORMATION

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.