



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

1. IDENTIFICATION

PRODUCT NAME: Kleen & Shine Stainless Steel Cleaner

DATE PREPARED: June 10, 2015

PART NUMBER: 74127

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

RECOMMENDED USE: Cleaner.

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: Sensitization, skin - Category 1
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements:



Signal word:

Danger

Hazard statements:

Extremely flammable aerosol. May cause an allergic skin reaction.

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 pierce or burn, even after use. Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.

Response:

If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage:

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

Disposal:

Dispose of contents/container in accordance with local/regional/national/international requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information:

None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
White Mineral Oil		8042-47-5	10 -20
Isobutane		75-28-5	2.5 - 10
Propane		74-98-6	2.5 - 10
d-Limonene		5989-27-5	0.1 - 1
Other components below reportable levels			60 - 80

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

4 FIRST-AID MEASURES

Inhalation:	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact:	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact:	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion:	In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed: Dermatitis. Rash. May cause an allergic skin reaction.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Water fog. Foam. Dry chemical powder. Dry chemicals. Carbon dioxide (CO ₂).
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.
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. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose 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 the 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. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
Environmental precautions:	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling:	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. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities:	Level 1 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 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 an ignition source. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Propane (CAS 74-98-6)	PEL	1800 mg/m ³ 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/m ³ 800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 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 ventilation, 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: Face shield is recommended. Wear safety glasses with side shields (or goggles).

Hand protection: Wear appropriate chemical resistant gloves.

Skin protection

Other: Wear appropriate chemical resistant gloves. Use of an impervious apron is recommended.

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 eat, drink or 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. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state:	Liquid.
Form:	Aerosol.
Color:	Not available.
Odor:	Not available.
Odor threshold:	Not available.
pH:	Not available.
Melting point/freezing point:	Not available.
Initial boiling point and boiling range:	212°F (100°C) estimated
Flash point:	-248.8°F (-156.0°C) Propellant estimated
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.

Lower and upper flammability or explosive limits

Flammability limit - lower (%)	1.8% estimated.
Flammability limit - upper (%)	9.5% estimated.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure:	Not available.
Vapor density:	Not available.
Relative density:	Not available.

Solubility(ies)

Solubility (water)	Not available.
Partition coefficient (n-octanol/water):	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

Other information

Flammability class:	Flammable IB estimated
Heat of combustion (NFPA 30B):	4.72 kJ/g estimated
Specific gravity	0.764 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:** May cause an allergic skin reaction.
- Eye contact:** Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics: Dermatitis. Rash. May cause an allergic skin reaction.

Information on toxicological effects

Acute toxicity: May cause an allergic skin reaction.

Components	Species	Test Results
Isobutane (CAS 75-28-5)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes 52%, 120 Minutes
	Rat	1355 mg/l
Propane (CAS 74-98-6)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	1237 mg/l, 120 Minutes 52%, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h
White Mineral Oil (CAS 8042-47-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	>2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	2.18 mg/l, 4 Hours

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

Skin corrosion/irritation:	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation:	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization:	Not available.
Skin sensitization:	May cause an allergic skin reaction.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

d-Limonene (CAS 5989-27-5) 3 Not classifiable as to carcinogenicity to humans.

11. TOXICOLOGICAL INFORMATION CONTINUED

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.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
d-Limonene (CAS 5989-27-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex)
Fish	LC50	Fathead minnow (Pimephales promelas)
		69.6 mg/l, 48 hours
		0.619 - 0.796 mg/l, 96 hours

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

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)

d-Limonene	4.232
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. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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 provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

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.

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	
Marine pollutant	No.
EmS	F-D, S-U
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 MARPOL 73/78 and the IBC Code Not applicable.

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.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance:

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Anhydrous Ammonia	7664-41-7	100	500 lbs		

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.

15. REGULATORY INFORMATION CONTINUED

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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 administered 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).

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.