



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: A/C FLUSH

DATE PREPARED: May 15, 2008

PART NUMBER: 74382-74383

PRODUCT TYPE: Solvent

CHROMATE INDUSTRIAL CORPORATION

CHEMICAL FAMILY: Solvent

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SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT/CAS NO.	WT%	OSHA PEL	OSHA PEL	ACGIH TLV	ACGIH TLV
		TWA	CEILING LIMITS	TWA	STEL
Methyl Hexanes	30-45	N/E	N/E	N/E	N/E
Isopropyl Acohol 67-63-0	2-30	400ppm	N/K	400ppm	500 ppm
Heptane 142-82-5	15-25	500 ppm:2000 mg/m3	N/E	400ppm: 1640mg/m3	500ppm
Dimethyl Pentanes None	5-10	N/E	N/E	N/E	N/E
Dimethyl Cyclopentanes None	0-5	N/E	N/E	N/E	N/E
Toluene 108-88-3	1.5-4	100 ppm	150 ppm	100 ppm	150 ppm

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Danger: EXTREMELY FLAMMABLE. May be fatal if swallowed. Harmful or fatal if liquid is aspirated into lungs. Causes severe eye irritation. May cause severe skin irritation. This material is readily absorbed through the skin in liquid or vapor phase. Gross inhalation overexposure may cause: Central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness or death.

HMIS Classification: Health: *2 Flammability: 3 Physical Hazard:0

NPA Rating: Health: 1 Flammability: 3 Reactivity:0

SECTION 4 – FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and *get medical attention immediately* after flushing.

Ingestion: **DO NOT INDUCE VOMITING.** Give nothing by mouth. **Get medical attention!** If vomiting occurs, keep head lower than hips to prevent aspiration.

Inhalation: If inhaled, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. *Get medical attention!*

Skin Contact: Wash with soap and water for 15 minutes. Get medical attention if irritation persists.

SECTION 5 – FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES****Flashpoint °F/°C:** 15°F (lowest component)**Flash Point Method:** TAG Closed Cup**Flammable Limits in Air- Lower (%):** 1.2% (lowest component)**Flammable Limits in Air-Upper (%):** 6.7% (lowest component)**Auto ignition Temperature °F/°C:** N/D**Extinguishing Media:** Carbon Dioxide. Dry chemical. Use water spray to keep containers cool that are exposed to heat or flames.**PROTECTION OF FIRE-FIGHTERS****Special Fire-Fighting Procedures:** Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire. Closed containers may explode if exposed to extreme heat. Water fog or spray may be used to cool exposed equipment and containers. Do not spray water directly on the fire-product will float and could be reignited on surface of water.**Hazardous Combustion Products:** Oxides of Carbon. Mixed hydrocarbons. Fumes and Smoke.**Aerosol Comments:** Not Applicable.**SECTION 6 – ACCIDENTAL RELEASE MEASURES****Personal Precautions:** Wear appropriate clothing and equipment to prevent skin and eye contact.**Spill Procedures:** Wear protective equipment specified. Avoid all sources of ignition, heat sparks and open flames. Persons not trained should evacuate area. Remove sources of ignition. Increase area ventilation. Wipe, scrape or soak up in an inert material and put in a container intended for flammable materials for disposal.**Environmental Precautions:** Do not allow to enter sanitary drains, sewer or surface and waters.**SECTION 7 – HANDLING AND STORAGE****Handling and Storage:** **WARNING: FLAMMABLE.** Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Keep container closed when not in use. Keep away from food and smoking materials. Wash hands before eating and smoking. Keep away from heat and open flame. Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material. Bond and ground during transfer.**SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION****Engineering Controls:** Exhaust ventilation. Showers. Eyewash stations.**Eyes:** Chemical goggles; also wear a face shield if splashing hazard exists. Do **NOT** wear contact lenses.**Skin Protection:** Avoid skin contact. Wear protective clothing and gloves. Use gloves resistant to the material being used (Viton, Nitrile.) Launder contaminated clothing before reuse.**Respiratory Protection:** Use local exhaust to capture vapor, mists or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup explosive concentrations of vapor in air.
NO SMOKING, OR USE OF FLAME OR OTHER IGNITION SOURCES. Use approved NIOSH respiratory protection if TLV exceeded, or over exposure is likely.**SECTION 9 – PHYSICAL/CHEMICAL CHARACTERISTICS****Appearance:** Colorless to light yellow liquid.**Odor:** Solvent/Lemon**Vapor Pressure:** N/D**Boiling Point (° F):** 180 °F (Lowest Component)**Solubility in Water:** APPROX. 25%**Molecular Weight:** Mixture**Viscosity:** 0.83cSt@100.0° F**VOC Content (%):** N/D**pH Value:** N/D**Vapor Density (Air=1):** N/D**Melting/Freezing Point:** N/D**Bulk Density at 20°C:** 6.00 lb/gal**Evaporation Rate:** N/D**Specific Gravity (H2O=1):** 0.92 @ 60° F**Decomposition Temperature:** N/K

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions to Avoid: Avoid any source of ignition. High temperatures. Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.

Materials to Avoid: Aluminum, NITROFORM. Strong oxidizing agents. Sulfuric Acid. Concentrated Oxygen.

Hazardous Decomposition Products: Oxides of carbon. Mixed Hydrocarbons. Smoke and Fumes.

Hazardous Polymerization: WILL NOT OCCUR.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxilogical Data:

INGREDIENTS/CAS NO.	WT%	ROUTE	SPECIES	DOSE
Methyl Hexanes	30-45	N/A	N/A	N/K
None				
Isopropyl Alcohol 67-33-0	20-30	Inhalation	Rats	LC50 16,000ppm
Heptane 142-82-5	15-25	Inhalation	Rats	LC50 103 gm/m3/4H
Dimethyl Pentanes	5-10	N/A	NA	N/K
None				
Dimethyl Cyclopentanes	0-5	N/A	NA	N/K
None				
Toluene 108-88-3	1.5-4	Inhalation	Rats	LC50 49 gm/m3/4H
INGREDIENTS/CAS NO.	WT%	IARC	NTP	OSHA
Methyl Hexanes	30-45	N/L	N/L	N/L
-None				
Isopropyl Alcohol 67-33-0	20-30	N/L	N/L	N/L
Heptane 142-82-5	15-25	N/L	N/L	N/L
INGREDIENTS/CAS NO.	WT%	ROUTE	SPECIES	DOSE
Methyl Hexanes	30-45	N/A	N/A	N/K
None				
Isopropyl Alcohol 67-33-0	20-30	Inhalation	Rats	LC50 16,000ppm
Heptane 142-82-5	15-25	Inhalation	Rats	LC50 103 gm/m3/4H
Dimethyl Pentanes	5-10	N/A	N/A	N/K
None				
Dimethyl Cyclopentanes	0-5	N/A	N/A	N/K
None				
Toluene 108-88-3	1.5-4	Inhalation	Rats	LC50 49 gm/m3/4H
INGREDIENTS/CAS NO.	WT%	IARC	NTP	OSHA
Methyl Hexanes	30-45	N/L	N/L	N/L
None				
Isopropyl Alcohol 67-33-0	20-30	N/L	N/L	N/L
Heptane 142-82-5	15-25	N/L	N/L	N/L
Dimethyl Pentanes	5-10	N/L	N/L	N/L
None				
Dimethyl Cyclopentanes	0-5	N/L	N/L	N/L
Toluene 108-88-3	1.5-4	Group 3 (Not classifiable)	N/L	N/L

N/A — NOT APPLICABLE
N/L—NOT LISTED

N/D — NOT DETERMINED

N/E — NONE ESTABLISHED

N/R — NOT REGULATED

SECTION 12 – ECOLOGICAL INFORMATION

Ecological Testing has not been conducted on this product.

SECTION 13 – DISPOSAL CONSIDERATIONS**Waste Classification:** N/D**Waste Management:** N/D

Disposal should be made in accordance with federal, state and local regulations.

SECTION 14 – TRANSPORT INFORMATION**U.S. DOT:****Proper Shipping Name:** Flammable Liquid, nos,
(Hepatane, Isopropyl Alcohol)**Hazard Class:** 3**UN/NA Number:** UN1993**DOT Packing Group:** PGII**IMDG:****Proper Shipping Name:** Flammable Liquid, nos
(Hepatane, Isopropyl Alcohol)**Hazard Class:** 3.2**Hazard Sub-class:** N/D**UN No.:** UN 1993**Packing Group:** PGII**Marine Pollutant:** No

SECTION 15 – REGULATORY INFORMATION

TOXICOLOGICAL DATA:

INGREDIENTS/CAS NO.	WT%	SARA 313	SARA302	RQ	TPQ
Methyl Hexanes	30-45	N/K	N/K	N/A	N/A
None					
Isopropyl Alcohol	20-30	Listed	N/L	N/A	N/A
67-33-0					
Heptane	15-25	N/L	N/L	N/A	N/A
142-82-5					
Dimethyl Pentanes	5-10	N/K	N/K	N/A	N/A
None					
Dimethyl Cyclopentanes	0-5	N/K	N/K	NA/	N/A
None					
Toluene	1.5-4	Listed	N/L	1000 lbs.	N/A
108-88-3					

INGREDIENTS/CAS NO.	WT%	IARC	NTP	OSHA
Methyl Hexanes	30-45	N/L	N/L	N/L
None				
Isopropyl Alcohol	20-30	N/L	N/L	N/L
67-33-0				
Heptane	15-25	N/L	N/L	N/L
142-82-5				
Dimethyl Pentanes	5-10	N/L	N/L	N/L
None				
Dimethyl Cyclopentanes	0-5	N/L	N/L	N/L
Toluene	1.5-4	Group 3 (Not classifiable)	N/L	N/L
108-88-3				

SARA 311/312 HAZARD CATEGORIES: N/D

STATE REGULATIONS:

INGREDIENTS/CAS NO.	WT%	CALIF. PROP 65	CALIF. PROP 65	CALIF. PROP 65	CALIF. PROP 65
		Cancer List	Developmental Toxicity	Reproductive Female	Reproductive Female
Methyl Hexanes	30-45	N/L	N/L	N/L	N/L
None					
Isopropyl Alcohol	20-30	N/L	N/L	N/L	N/L
67-33-0					
Heptane	15-25	N/L	N/L	N/L	N/L
142-82-5					
Dimethyl Pentanes	5-10	N/L	N/L	N/L	N/L
None					
Dimethyl Cyclopentanes	0-5	N/L	N/L	N/L	N/L
None					
Toluene	1.5-4	N/L	Listed Developmental	N/L	N/L
108-88-3			toxicity: initial date 1/1/91		

U.S. TSCA The components of this product are listed on TSCA Inventory.

SECTION 16 – OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Disclaimer:

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N/A — NOT APPLICABLE
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N/E — NONE ESTABLISHED

N/R — NOT REGULATED