



# MATERIAL SAFETY DATA SHEET

**CHROMATE INDUSTRIAL CORPORATION®**  
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**FOR CHEMICAL  
EMERGENCY**

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MULTI-PURPOSE PVC-ABS-CPVC CEMENT  
**PART NUMBER:** 74550  
**PRODUCT TYPE:** CEMENT

**DATE PREPARED:** January 6, 2015  
**CHROMATE INDUSTRIAL CORPORATION**  
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## SECTION 2: HAZARDS IDENTIFICATION

### GHS Classification

Flammable Liquids - Category 2  
Acute Toxicity Oral - Category 4  
Acute Toxicity Dermal - Category 4  
Acute Toxicity Inhalation - Category 4  
Eye Damage/Irritation - Category 2A  
Carcinogenicity - Category 2  
Specific Target Organ Toxicity Single Exposure - Category 3

### GHS Label Elements

#### Symbol(s)



#### Signal Word

Danger

### Hazard Statements

Highly flammable liquid and vapor.  
Harmful if swallowed.  
Harmful in contact with skin.  
Harmful if inhaled.  
Causes serious eye irritation.  
Contains a chemical classified by the US EPA as a suspected possible carcinogen.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.

### Precautionary Statements

#### Prevention

Keep away from heat/sparks/open flames and hot surfaces. No smoking.  
Keep container tightly closed.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves/eye protection/face protection.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing fume/gas/mist/vapors.  
Use only outdoors or in a well-ventilated area.

**SECTION 2 CONTINUED: HAZARDS IDENTIFICATION****Response**

If on skin (or hair):	Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
If swallowed:	Call a poison center/doctor if you feel unwell. Rinse mouth.
If inhaled:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
If in eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
If exposed or concerned:	Get medical advice/attention.
In case of fire:	Use dry chemical, CO2 or foam to extinguish fire.

**Storage**

Store in a well-ventilated place. Keep cool.  
Store locked up.

**Disposal**

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

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

CAS#	Component	Percent
109-99-9	Tetrahydrofuran	30-45
108-94-1	Cyclohexanone	10-20
67-64-1	Acetone	10-20
78-93-3	Methyl ethyl ketone	8-18
9002-86-2	PVC (Chloroethylene, polymer)	8-15
68648-82-8	Ethene, chloro-, homopolymer, chlorinated	3-7
112945-52-5	Silica, amorphous, fumed, crystalline-free	1-5

**SECTION 4: FIRST AID MEASURES****First Aid: Eyes**

If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

**First Aid: Skin**

Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with hand cleaner or baby oil.

**First Aid: Ingestion**

DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

**First Aid: Inhalation**

If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

**SECTION 5: FIRE FIGHTING MEASURES****General Fire Hazards**

See Section 9 for Flammability Properties.

Highly flammable liquid and vapor. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.

**Hazardous Combustion Products**

Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

**Extinguishing Media**

Use dry chemical, CO<sub>2</sub>, or foam to extinguish fire. Cool fire exposed container with water. Water may be ineffective as an extinguishing agent.

**Unsuitable Extinguishing Media**

None.

**Fire Fighting Equipment/Instructions**

Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Recovery and Neutralization**

Stop leak if it can be done without risk.

**Materials and Methods for Clean-Up**

Remove all sources of ignition and ventilate area. Soak up spill with an inert absorbent such as sand, earth or other noncombusting material. Put absorbent material in covered, labeled metal containers.

**Emergency Measures**

Isolate area. Keep unnecessary personnel away.

**Personal Precautions and Protective Equipment**

Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high.

**Environmental Precautions**

Prevent liquid from entering watercourses, sewers and natural waterways.

**Prevention of Secondary Hazards**

None.

## SECTION 7: HANDLING AND STORAGE

### Handling Procedures

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation (equivalent to outdoors).

Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames, and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use. "Empty" containers retain product residue and can be hazardous. Follow all SDS precautions in handling empty containers. Do not cut or weld on or near empty or full containers.

### Storage Procedures

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.

### Incompatibilities

Oxidizing agents, alkalis, amines, ammonia, acids, chlorine compounds, chlorinated inorganics (potassium, calcium, and sodium hypochlorite) and hydrogen peroxides. May attack plastic, resins and rubber.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

#### Tetrahydrofuran (109-99-9)

**ACGIH:** 50 ppm TWA  
100 ppm STEL  
Skin - potential significant contribution to overall exposure by the cutaneous route.

**OSHA:** 200 ppm TWA; 590 mg/m<sup>3</sup> TWA

**NIOSH:** 200 ppm TWA; 590 mg/m<sup>3</sup> TWA  
250 ppm STEL; 735 mg/m<sup>3</sup> STEL

#### Cyclohexanone (108-94-1)

**ACGIH:** 20 ppm TWA  
50 ppm STEL  
Skin - potential significant contribution to overall exposure by the cutaneous route.

**OSHA:** 50 ppm TWA; 200 mg/m<sup>3</sup> TWA

**NIOSH:** 25 ppm TWA; 100 mg/m<sup>3</sup> TWA  
Potential for dermal absorption.

#### Acetone (67-64-1)

**ACGIH:** 500 ppm TWA  
750 ppm STEL

**OSHA:** 1000 ppm TWA; 2400 mg/m<sup>3</sup> TWA

**NIOSH:** 250 ppm TWA; 590 mg/m<sup>3</sup> TWA

#### Methyl ethyl ketone (78-93-3)

**ACGIH:** 200 ppm TWA  
300 ppm STEL

**OSHA:** 200 ppm TWA; 590 mg/m<sup>3</sup> TWA

**NIOSH:** 200 ppm TWA; 590 mg/m<sup>3</sup> TWA  
300 ppm STEL; 885 mg/m<sup>3</sup> STEL

#### PVC (Chloroethylene, polymer) (9002-86-2)

**ACGIH:** 1 mg/m<sup>3</sup> TWA (respirable fraction)

## SECTION 8 CONTINUED: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering Measures

Open doors & windows. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. If used in an enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.

### Personal Protective Equipment: Respiratory

For operations where the exposure limit may be exceeded, a NIOSH approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

### Personal Protective Equipment: Hands

Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

### Personal Protective Equipment: Eyes

Safety glasses with side shields or safety goggles.

### Personal Protective Equipment: Skin and Body

No additional protective equipment needed.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Milky	Odor:	Ether-like
Physical State:	Liquid	pH:	NA
Vapor Pressure:	145 mmHg @ 20°C	Vapor Density:	2.5
Boiling Point:	151°F (66°C)	Melting Point:	NA
Solubility (H <sub>2</sub> O):	Negligible	Specific Gravity:	0.94 +/- 0.02 @ 20°C
Evaporation Rate:	(BUAC = 1) = 5.5 - 8.0	VOC:	80-84%
Octanol/H <sub>2</sub> O Coeff.:	ND	Flash Point:	14-23°F (-10 to -5°C)
Flash Point Method:	CCCFP	Upper Flammability Limit (UFL):	11.8
Lower Flammability Limit (LFL):	1.8	Burning Rate:	ND
Auto Ignition:	ND		

## SECTION 10: CHEMICAL STABILITY & REACTIVITY INFORMATION

### Chemical Stability

This is a stable material.

### Hazardous Reaction Potential

Will not occur.

### Conditions to Avoid

Avoid heat, sparks, flames and other sources of ignition.

### Incompatible Products

Oxidizing agents, alkalis, amines, ammonia, acids, chlorine compounds, chlorinated inorganics (potassium, calcium and sodium hypochlorite) and hydrogen peroxides. May attack plastic, resins and rubber.

### Hazardous Decomposition Products

Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

**SECTION 11: TOXICOLOGICAL INFORMATION****Acute Toxicity****Component Analysis - LD50/LC50****Tetrahydrofuran (109-99-9)**

Inhalation LC50 Rat 53.9 mg/L 4 h; Inhalation LC50 Rat 180 mg/L 1h; Oral LD50 Rat 1650 mg/kg

**Cyclohexanone (108-94-1)**

Inhalation LC50 Rat 10.7 mg/L 4 h; Inhalation LC50 Rat 8000 ppm 4 h; Oral LD50 Rat 800 mg/kg; Dermal LD50 Rabbit 948 mg/kg

**Acetone (67-64-1)**

Oral LD50 Rat 5800 mg/kg

**Methyl ethyl ketone (78-93-3)**

Inhalation LC50 Mouse 32 g/m<sup>3</sup> 4 h; Oral LD50 Rat 2737 mg/kg; Dermal LD50 Rabbit 6480 mg/kg

**Silica, amorphous, fumed, crystalline-free (112945-52-5)**

Oral LD50 Rat 3160 mg/kg

**Potential Health Effects: Skin Corrosion Property/Stimulativeness**

May cause irritation with redness, itching and pain. Methyl ethyl ketone and cyclohexanone may be absorbed through the skin causing effects similar to those listed under inhalation.

**Potential Health Effects: Eye Critical Damage/Stimulativeness**

Vapors may cause irritation. Direct contact may cause irritation with redness, stinging and tearing of the eyes. May cause eye damage.

**Potential Health Effects: Ingestion**

Swallowing may cause abdominal pain, nausea, vomiting and diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver damage.

**Potential Health Effects: Inhalation**

Vapors or mists may cause mucous membrane and respiratory irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness. May cause kidney, liver and lung damage.

**Respiratory Organs Sensitization/Skin Sensitization**

This product is not reported to have any skin sensitization effects.

**Generative Cell Mutagenicity**

Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.

**SECTION 11 CONTINUED: TOXICOLOGICAL INFORMATION****Carcinogenicity****A: General Product Information**

In 2012 USEPA Integrated Risk Information System (IRIS) reviewed a two species inhalation lifetime study on THF conducted by NTP (1998). Male rats develop renal tumors and female mice developed liver tumors while neither the female rats nor the male mice showed similar results. Because the carcinogenic mechanisms could not be identified clearly in either species for either tumor, the EPA determined that the male rat and female mouse findings are relevant to the assessment of carcinogenic potential in humans. Therefore, the IRIS review concludes that these data in aggregate indicate that there is "suggestive evidence of carcinogenic potential" following exposure to THF by all routes of exposure.

**B: Component Carcinogenicity****Tetrahydrofuran (109-99-9)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

**Cyclohexane (108-94-1)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 71 (1999); Monograph 47 (1989) (Group 3 (not classifiable))

**Acetone (67-64-1)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

**PVC (Chloroethylene, polymer) (9002-86-2)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Supplement 7 (1987); Monograph 19 (1979) (Group 3 (not classifiable))

**Silica, amorphous, fumed, crystalline-free (112945-52-5)**

IARC: Monograph 68 (1997) (listed under Amorphous silica) (Group 3 (not classifiable))

**Reproductive Toxicity**

Methyl ethyl ketone and cyclohexanone have been shown to cause embryofetal toxicity and birth defects in laboratory animals.

Acetone and tetrahydrofuran have been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.

**Specific Target Organ General Toxicity: Single Exposure**

May cause respiratory irritation. Inhalation of high concentrations may cause central nervous system depression, narcosis and unconsciousness. May cause kidney, liver and lung damage.

**Specific Target Organ General Toxicity: Repeated Exposure**

This product is not reported to have any specific target organ toxicity repeat exposure effects.

**Aspiration Respiratory Organs Hazard**

Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver damage.

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

#### A: General Product Information

This product is not expected to be toxic to aquatic organisms.

#### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

##### Tetrahydrofuran (109-99-9)

###### Test & Species

96 Hr LC50 Pimephales promelas

96 Hr LC50 Pimephales promelas

24 Hr EC50 Daphnia magna

###### Conditions

1970-2360 mg/L (flow-through)

2700-3600 mg/L (static)

5930 mg/L

##### Cyclohexanone (108-94-1)

###### Test & Species

96 Hr LC50 Pimephales promelas

96 Hr LC50 Pimephales promelas

96 Hr EC50 Chlorella vulgaris

24 Hr EC50 Daphnia magna

###### Conditions

481-578 mg/L (flow-through)

8.9 mg/L

20 mg/L

800 mg/L

##### Acetone (67-64-1)

###### Test & Species

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Pimephales promelas

96 Hr LC50 Lepomis macrochirus

48 Hr EC50 Daphnia magna

48 Hr EC50 Daphnia magna

###### Conditions

4.74-6.33 mL/L

6210-8120 mg/L (static)

8300 mg/L

10294-17704 mg/L (static)

12600-12700 mg/L

##### Methyl ethyl ketone (78-93-3)

###### Test & Species

96 Hr LC50 Pimephales promelas

48 Hr EC50 Daphnia magna

48 Hr EC50 Daphnia magna

48 Hr EC50 Daphnia magna

###### Conditions

3130-3320 mg/L (flow-through)

>520 mg/L

5091 mg/L

4025-6440 mg/L (static)

#### Persistence/Degradability

No information available for the product.

#### Bioaccumulation

No information available for the product.

#### Mobility in Soil

No information available for the product.



**SECTION 13: DISPOSAL CONSIDERATIONS****Waste Disposal Instructions**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

**Disposal of Contaminated Containers or Packaging**

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

**SECTION 14: TRANSPORTATION INFORMATION****DOT Information****For Greater than 1 liter (0.3 gal):**

**Shipping Name:** Adhesives

**UN#:** 1133    **Hazard Class:** 3    **Packing Group:** II

**Required Label(s):** Flammable Liquid

**For Less than 1 liter (0.3 gal):**

**Shipping Name:** Consumer Commodity, ORM-D

**IMDG Information****For Greater than 1 liter (0.3 gal):**

**Shipping Name:** Adhesives

**UN#:** 1133    **Hazard Class:** 3    **Packing Group:** II

**Required Label(s):** Flammable Liquid

**For Less than 1 liter (0.3 gal):**

**Shipping Name:** Adhesives

**UN#:** 1133    **Hazard Class:** 3    **Packing Group:** II

**Required Label(s):** None (Limited Quantities are expected from labeling)

**SECTION 15: REGULATORY INFORMATION****Regulatory Information****US Federal Regulations****Component Analysis**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4)

**Tetrahydrofuran (109-99-9)**

CERCLA: 1000 lb final RQ; 454 kg final RQ

**Cyclohexanone (108-94-1)**

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**Acetone (67-64-1)**

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**Methyl ethyl ketone (78-93-3)**

CERCLA: 5000 lb final RQ; 2270 kg final RQ

**SECTION 15 CONTINUED: REGULATORY INFORMATION**

**State Regulations**

**Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Tetrahydrofuran	109-99-9	Yes	Yes	Yes	Yes	Yes	No
Cyclohexanone	108-94-1	Yes	Yes	Yes	Yes	Yes	No
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	No
Methyl ethyl ketone	78-93-3	Yes	Yes	Yes	Yes	Yes	No
PVC (Chloroethylene, polymer)	9002-86-2	No	No	No	Yes	No	No

**Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Tetrahydrofuran	109-99-9	1%
Cyclohexanone	108-94-1	0.1%
Acetone	67-64-1	1%
Methyl ethyl ketone	78-93-3	1%

**Additional Regulatory Information**

**A: General Product Information**

This product contains trace amounts of chemicals known to the State of California to cause cancer. Under normal use conditions, exposure to these chemicals at levels above the State of California “No Significant Risk Level” (NSRL) are unlikely. The use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 will minimize exposure to these chemicals.

**B: Component Analysis - Inventory**

Component	CAS	TSCA	CAN	EEC
Tetrahydrofuran	109-99-9	Yes	DSL	EINECS
Cyclohexanone	108-94-1	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS
Methyl ethyl ketone	78-93-3	Yes	DSL	EINECS
PVC (Chloroethylene, polymer)	9002-86-2	Yes	DSL	ELINCS
Ethene, chloro-, homopolymer, chlorinated	68648-82-8	Yes	DSL	No
Silica, amorphous, fumed, crystalline-free	112945-52-5	No	DSL	No

**SECTION 16: OTHER INFORMATION****Key/Legend**

EPA = Environmental Protection Agency  
TSCA = Toxic Substance Control Act  
ACGIH = American Conference of Government Industrial Hygienists  
IARC = International Agency for Research on Cancer  
NIOSH = National Institute for Occupational Safety and Health  
NTP = National Toxicology Program  
OSHA = Occupational Safety and Health Administration  
NJTSR = New Jersey Trade Secret Registry

**Literature References**

None

**Other Information**

NFPA and HMIS:

NFPA Hazard Signal:	Health: 2	Flammability: 3	Reactivity: 1	Special: None
HMIS Hazard Signal:	Health: 2*	Flammability: 3	Reactivity: 1	PPE: G

**Disclaimer:**

The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, we cannot give any guarantees regarding information from other sources, and expressly do not make warranties, nor assume any liability for its use.

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