



Safety Data Sheet

Issue Date: 01-Jan-2011

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Version 1

1. IDENTIFICATION

Product Identifier

Product Name Cal 247

Other means of identification

SDS # CPCI-032
UN/ID No UN2922

Recommended use of the chemical and restrictions on use

Recommended Use Cleaning agent.

Details of the supplier of the safety data sheet

Supplier Address

Cal Pac Chemicals, Inc
6231 Maywood Ave
Huntington Park, CA 90255

Emergency Telephone Number

Company Phone Number (323) 585-2178
Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Amber liquid

Physical State Liquid

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

Signal Word

Danger

Hazard Statements

Harmful if swallowed
Harmful in contact with skin
Fatal if inhaled
Causes severe skin burns and eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Chromium trioxide (CrO ₃)	1333-82-0	>10
Sulfuric Acid	7664-93-9	<10
Nitric acid	7697-37-2	<10

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention.
Skin Contact	Wash off immediately with plenty of water. Wash skin thoroughly with mild soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Immediately drink large amounts of milk, water, or gelatin solution. Do not induce vomiting without medical advice. Get medical attention immediately.

Most important symptoms and effects

Symptoms	May cause severe burns to skin, eyes and other body tissue.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Contents are corrosive and all personal contact must be avoided. Contact with metals may evolve flammable hydrogen gas.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal Precautions** Use personal protective equipment as required.
- Environmental Precautions** Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

- Methods for Containment** Prevent further leakage or spillage if safe to do so.
- Methods for Clean-Up** Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Neutralize with a lime or soda ash and flush area with large amounts of water.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on Safe Handling** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wash thoroughly after handling. Use only in well-ventilated areas. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Use plastic taps or pumps for dispensing. Do not use aluminum, zinc, or white metal fitting taps with stock solution tanks.

Conditions for safe storage, including any incompatibilities

- Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Store away from food stuffs. Keep out of the reach of children.
- Incompatible Materials** Strong alkalis. Chlorinated products. Copper. Brass.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chromium trioxide (CrO ₃) 1333-82-0	TWA: 0.05 mg/m ³ Cr	TWA: 5 µg/m ³ (vacated) Ceiling: 0.1 mg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect	IDLH: 15 mg/m ³ Cr(VI) TWA: 0.001 mg/m ³ Cr
Sulfuric Acid 7664-93-9	TWA: 0.2 mg/m ³ thoracic fraction	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³
Nitric acid 7697-37-2	STEL: 4 ppm TWA: 2 ppm	TWA: 2 ppm TWA: 5 mg/m ³ (vacated) TWA: 2 ppm (vacated) TWA: 5 mg/m ³ (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m ³	IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m ³ STEL: 4 ppm STEL: 10 mg/m ³

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side shields, goggles and/or a face shield.

Skin and Body Protection Rubber or acid resistant gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory Protection NIOSH-approved acid cartridge respirator in areas of high mist or fume concentration.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Not determined
Appearance	Amber liquid	Odor Threshold	Not determined
Color	Amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	>1.4 (1% solution)	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	Not available	
Flash Point	Not combustible	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	Not available	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not available	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Mixing with chlorinated products may release irritating or toxic gases. May release hydrogen gas if allowed to contact copper or brass.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Use plastic taps or pumps for dispensing. Do not use aluminum, zinc, or white metal fitting taps with stock solution tanks.

Incompatible Materials

Strong alkalis. Chlorinated products. Copper. Brass.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes severe eye damage. Damage may not be reversible.
Skin Contact	Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.
Inhalation	Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingestion	Fatal or harmful if swallowed. Causes nausea, vomiting and burns to mouth and esophagus. May cause center

Component Information

<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Chromium trioxide (CrO3) 1333-82-0	= 50 mg/kg (Rat)	= 55 mg/kg (Rat) = 20 mg/kg (Rabbit)	= 0.217 mg/L (Rat) 4 h
Sulfuric Acid 7664-93-9	= 2140 mg/kg (Rat)	-	= 510 mg/m ³ (Rat) 2 h
Nitric acid 7697-37-2	-	-	= 7 mg/L (Rat) 1 h = 130 mg/m ³ (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	May cause genetic defects.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Chromium trioxide (CrO ₃) 1333-82-0	A1	Group 1	Known	X
Sulfuric Acid 7664-93-9	A2	Group 1	Known	X
Nitric acid 7697-37-2		Group 2A		X

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)**

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Suspected of damaging fertility or the unborn child.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Chromium trioxide (CrO ₃) 1333-82-0		40: 96 h Colisa fasciatus mg/L LC50 static		
Sulfuric Acid 7664-93-9		500: 96 h Brachydanio rerio mg/L LC50 static		29: 24 h Daphnia magna mg/L EC50
Nitric acid 7697-37-2		72: 96 h Gambusia affinis mg/L LC50		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Nitric acid 7697-37-2	-2.3

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Chromium trioxide (CrO3) 1333-82-0	Toxic Corrosive Ignitable
Sulfuric Acid 7664-93-9	Toxic Corrosive
Nitric acid 7697-37-2	Toxic Corrosive Ignitable

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN2922
 Proper Shipping Name Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Chromic acid)
 Hazard Class 8
 Subsidiary Hazard Class 6.1
 Packing Group II

IATA

UN/ID No UN2922
 Proper Shipping Name Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Chromic acid)
 Hazard Class 8
 Subsidiary Hazard Class 6.1
 Packing Group II

IMDG

UN/ID No UN2922
 Proper Shipping Name Corrosive liquid, toxic, n.o.s. (Sulfuric acid, Chromic acid)
 Hazard Class 8
 Subsidiary Hazard Class 6.1
 Packing Group II

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sulfuric Acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Nitric acid 7697-37-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Chromium trioxide (CrO ₃) - 1333-82-0	1333-82-0	>10	0.1
Sulfuric Acid - 7664-93-9	7664-93-9	<10	1.0
Nitric acid - 7697-37-2	7697-37-2	<10	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chromium trioxide (CrO ₃) 1333-82-0 (>10)		X		
Sulfuric Acid 7664-93-9 (<10)	1000 lb			X
Nitric acid 7697-37-2 (<10)	1000 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Chromium trioxide (CrO ₃) - 1333-82-0	Carcinogen Developmental Female Reproductive Male Reproductive
Sulfuric Acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Chromium trioxide (CrO ₃) 1333-82-0	X	X	X

Sulfuric Acid 7664-93-9	X	X	X
Nitric acid 7697-37-2	X	X	X

16. OTHER INFORMATION

NFPA**Health Hazards****Flammability****Instability****Special Hazards**

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ACID

HMIS**Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

Issue Date:

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12-May-2014

Revision Note:

New format

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.

End of Safety Data Sheet