



# Safety Data Sheet

Issue Date: 01-Jan-2013

Revision Date: 13-Nov-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Deox L

### Other means of identification

**SDS #** CPCI-067

**UN/ID No** UN1760

### 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** Clear dark amber liquid

**Physical State** Liquid

**Odor** Slight Acidic, pungent odor

### Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A

### Signal Word

**Danger**

### Hazard Statements

Harmful if swallowed

Harmful if inhaled

Causes severe skin burns and eye damage

May cause cancer



### **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  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray

### **Precautionary Statements - Response**

Immediately call a poison center or doctor/physician  
 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 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: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do not induce vomiting

### **Precautionary Statements - Storage**

Store locked up

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### **Other Hazards**

Harmful to aquatic life with long lasting effects

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Chemical Name</b>	<b>CAS No</b>	<b>Weight-%</b>
Ferric Sulfate	10028-22-5	30-35
Sulfuric Acid	7664-93-9	1-5
Nitric acid	7697-37-2	3-5

\*\*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**

Provide this SDS to medical personnel for treatment.

#### **Eye Contact**

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.

<b>Skin Contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	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.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Most important symptoms and effects**

<b>Symptoms</b>	Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

May cause fire hazard when in contact with combustible material. Product may react with active metals (e.g. aluminum, zinc, tin, etc.) to release 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**

<b>Personal Precautions</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep unprotected persons away. Ventilate affected area.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Absorb with inert material and then place in suitable container for chemical waste. Do not use combustible materials to absorb spills. Dispose of in accordance with federal, state and local regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. 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. Use only outdoors or in a well-ventilated area. Do not breathe
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dust/fume/gas/mist/vapors/spray.

### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.
<b>Incompatible Materials</b>	Alkalis. Oxidizing agents. Organic materials. Metals. Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ferric Sulfate 10028-22-5	TWA: 1 mg/m <sup>3</sup> Fe TWA: 0.1 mg/m <sup>3</sup> Persulfate	(vacated) TWA: 1 mg/m <sup>3</sup> Fe	TWA: 1 mg/m <sup>3</sup> Fe
Sulfuric Acid 7664-93-9	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>
Nitric acid 7697-37-2	STEL: 4 ppm TWA: 2 ppm	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 2 ppm (vacated) TWA: 5 mg/m <sup>3</sup> (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m <sup>3</sup>	IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10 mg/m <sup>3</sup>
Fluorosilicic acid 16961-83-4	TWA: 2.5 mg/m <sup>3</sup> F	TWA: 2.5 mg/m <sup>3</sup> F TWA: 2.5 mg/m <sup>3</sup> dust (vacated) TWA: 2.5 mg/m <sup>3</sup>	TWA: 2.5 mg/m <sup>3</sup> F

### Appropriate engineering controls

<b>Engineering Controls</b>	Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.
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### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	Wear splash goggles and face shield.
<b>Skin and Body Protection</b>	Chemical resistant gloves. Aprons.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**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

<b>Physical State</b>	Liquid	<b>Odor</b>	Slight Acidic, pungent odor
<b>Appearance</b>	Clear dark amber liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Dark amber	<b>Remarks • Method</b>	
<b>Property</b>	<b>Values</b>		
pH	0-1		
Melting Point/Freezing Point	2.2 °C / 36 °F		
Boiling Point/Boiling Range	100 °C / 212 °F		
Flash Point	Not determined		
Evaporation Rate	<1	(butyl acetate = 1)	
Flammability (Solid, Gas)	Liquid- Not Applicable		
Upper Flammability Limits	Not determined		

<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	17 mmHg	@ 20°C (68°F)
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	1.35	(Water = 1)
<b>Water Solubility</b>	Completely soluble	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Alkalis. Oxidizing agents. Organic materials. Metals. Acids.

### 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.

**Skin Contact** Causes severe skin burns.

**Inhalation** Harmful if inhaled.

**Ingestion** Harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ferric Sulfate 10028-22-5	= 500 mg/kg ( Rat )	-	-
Sulfuric Acid 7664-93-9	= 2140 mg/kg ( Rat )	-	= 510 mg/m <sup>3</sup> ( Rat ) 2 h
Nitric acid 7697-37-2	-	-	= 67 ppm ( Rat ) 4 h = 130 mg/m <sup>3</sup> ( Rat ) 4 h
Fluorosilicic acid 16961-83-4	= 430 mg/kg ( Rat )	-	= 1.11 mg/L ( Rat ) 1 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****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. IARC has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid. Inorganic mist is not generated under normal use of this product.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric Acid 7664-93-9	A2	Group 1	Known	X
Nitric acid 7697-37-2		Group 2A		X
Fluorosilicic acid 16961-83-4		Group 3		

**Legend**

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

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 3 IARC components are "not classifiable as human carcinogens"

**NTP (National Toxicology Program)**

Known - Known Carcinogen

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

X - Present

**Numerical measures of toxicity**

Not determined

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ferric Sulfate 10028-22-5		37.2: 96 h <i>Gambusia affinis</i> mg/L LC50 static		
Sulfuric Acid 7664-93-9		500: 96 h <i>Brachydanio rerio</i> mg/L LC50 static		29: 24 h <i>Daphnia magna</i> mg/L EC50
Nitric acid 7697-37-2		72: 96 h <i>Gambusia affinis</i> mg/L LC50		
Fluorosilicic acid 16961-83-4		65: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 28.7: 96 h <i>Pimephales promelas</i> mg/L LC50 static		

**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**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Sulfuric Acid 7664-93-9	Toxic Corrosive
Nitric acid 7697-37-2	Toxic Corrosive Ignitable
Fluorosilicic acid 16961-83-4	Toxic Corrosive

**14. TRANSPORT INFORMATION**

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

**DOT**

<b>UN/ID No</b>	UN1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s. (nitric acid, ferric sulfate)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**IATA**

<b>UN/ID No</b>	UN1760
<b>Proper Shipping Name</b>	Corrosive liquid, n.o.s. (nitric acid, ferric sulfate)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**IMDG**

<b>UN/ID No</b>	UN1760
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Marine Pollutant</b>	This material may meet the definition of a marine pollutant

**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ferric Sulfate	Present	X		Present		Present	X	Present	X	X
Sulfuric Acid	Present	X		Present		Present	X	Present	X	X
Nitric acid	Present	X		Present		Present	X	Present	X	X

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ferric Sulfate 10028-22-5	1000 lb		RQ 1000 lb final RQ RQ 454 kg final 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**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sulfuric Acid - 7664-93-9	7664-93-9	3.95	1.0
Nitric acid - 7697-37-2	7697-37-2	3.9	1.0

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ferric Sulfate	1000 lb			X
Sulfuric Acid	1000 lb			X
Nitric acid	1000 lb			X

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Sulfuric Acid - 7664-93-9	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ferric Sulfate 10028-22-5	X	X	X
Sulfuric Acid 7664-93-9	X	X	X
Nitric acid 7697-37-2	X	X	X
Fluorosilicic acid 16961-83-4	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	3	1	1	Acid
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	3	1	1	H

**Issue Date:** 01-Jan-2013  
**Revision Date:** 13-Nov-2015  
**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**