



Material Safety Data Sheet

NFPA	PPE	

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24-451 - DECCO Fruit & Vegetable Kleen 451

1. PRODUCT AND COMPANY IDENTIFICATION

DECCO

Cerexagri, Inc.
1713 S. California Ave.
Monrovia, CA 91016-0120

Emergency Telephone Number

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

Company Information

Decco-Cerexagri

Contact Information

Customer Service

Phone Number

626-358-1838

Available Hrs

8:00am - 5:00pm (PT)

Product Name

DECCO Fruit & Vegetable Kleen 451

Recommended Use

Alkaline cleaner

Product Code

24-451

2. HAZARDS IDENTIFICATION

Emergency Overview

The product causes burns of eyes, skin and mucous membranes
Harmful if swallowed
Irritating to respiratory system

DANGER!**Appearance** Clear, Light brown.**Physical State** Liquid.**Odor** Not availablePotential Health Effects

- Inhalation
- Skin contact

Eyes

Causes burns. Direct contact of liquid with the eyes may cause burns or severe irritation with pain, redness, swelling and injury to the cornea..

Skin

Causes burns. This material may cause destruction to tissue producing severe burns which may not be immediately painful or visible. Contact with body tissues may produce deep ulceration, scarring or loss of sight. . Dermatitis and superficial skin damage can result from repeated or prolonged contact with very dilute solutions. .

Inhalation

Harmful by inhalation. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity..

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion causes burns of the upper digestive and respiratory tracts.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Sodium hydroxide	1310-73-2	1-20	N/A
Octylphenoxy polyethoxyethanol	9036-19-5	1-40	N/A
Ethylene diamine tetraacetic acid	60-00-4	1-20	N/A

4. FIRST AID MEASURES**Eye Contact**

Hold eye open and rinse slowly and gently with water for 30 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

Skin Contact

Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes.
Call poison control center or doctor for treatment advice.

Inhalation

Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration.
Call a poison control center or doctor for further treatment advice.

Ingestion

Call a physician or Poison Control Center immediately
If able to swallow, give plenty of water.
Do not induce vomiting unless told to do so by a poison control center or doctor
Never give anything by mouth to an unconscious person

Notes to Physician

No information available

5. FIRE-FIGHTING MEASURES**Flammable Explosive Properties****Flash Point**

Not available

Autoignition Temperature

Not available

Flammability Limits in Air

Not available

Extinguishing Media

Use: Water spray, Foam, Dry chemical.

Fire/Explosion Hazard

Firefighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear and self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

Hazardous Combustion Products

Avoid breathing fumes from fire exposed material. .

NFPA

Health 3

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions**

Avoid contact with the skin and the eyes. Use personal protective equipment.

Environmental Precautions	Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits..
Methods for Clean-up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling	Keep out of reach of children. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Wear personal protective equipment. Empty containers may contain hazardous residues.
Storage	Keep out of the reach of children. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Store out of direct sunlight. Store at temperatures below 90 F..

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Engineering Controls	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. .
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Personal Protective Equipment

Eye/face Protection

Use eye protection to avoid eye contact. . Goggles. If splashes are likely to occur, wear: Face-shield.

Skin Protection

Chemical resistant gloves. Chemical resistant protective clothing.

Respiratory Protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134. .

General Hygiene Considerations

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear Light brown	Odor	Not available
Physical State	Liquid	pH	> 12
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	1.006 g/cc	Solubility	Completely soluble
Evaporation Rate	Not available	Vapor Pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	Not available	Molecular Weight	No data available
Bulk Density	8.4 lbs/gal	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Keep away from children.
Incompatible Materials	May react violently with strong acids and oxidizers. Avoid contact with zinc, aluminum, tin, bronze, lead, wool and

leather. Avoid contact with combustible materials. . halogens. anhydrides.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Ammonical vapors.

Possibility of Hazardous Polymerization

Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION**Acute Toxicity****Component Information****Sodium hydroxide**

Single exposure studies indicate that this material is slightly toxic if absorbed through skin (rat LD50 1,350 mg/kg) and corrosive to rabbit eyes and skin. Many publications in the scientific literature confirm that this material is corrosive to all tissues. Repeated inhalation resulted in lung damage in rats. No tumors were seen in long-term animal studies. No genetic changes were observed in tests using bacteria.

No significant increases in mortality in relation to duration or intensity of exposures were reported in an epidemiologic study of a small group of workers exposed to caustic dust for 30 + years. Massive ingestion of this material has been implicated as causing esophageal cancer. Squamous cell carcinomas of the esophagus occurred approximately 12-24 years later in individuals who survived accidental childhood ingestion and are likely due to the tissue destruction and possible scarring of the esophagus rather than a direct effect of this material.

Octylphenoxy polyethoxyethanol

Single exposure studies indicate that this material is slightly toxic to rats if swallowed (LD50 4,920mg/kgMW250) practically non-toxic to rabbits if absorbed through skin (LD50>16,000mg/kg, MW250)and rats if inhaled (no deaths after 1 hr exposure to 21.5 mg/l, MW624) slightly to moderately irritating to rabbit skin (4 hr exposure, MW250) and severely irritating to rabbit eyes (MW 250 and 624). Administration (average MW 624) in the diet of pregnant rats caused an increase in the number of ribs in the fetuses at a level sufficient to cause maternal toxicity. No genetic changes were observed in standard tests using bacteria and animal cells.

EDTA (Ethylene diamine tetraacetic acid)

Single exposure studies indicate that this material is slightly toxic if swallowed (rat LD50 >2,000 mg/kg), slightly to moderately irritating to rabbit eyes. Skin allergy was reported in guinea pigs following repeated exposures to Tetrasodium EDTA in controlled skin contact studies. The biological effects of EDTA are associated with its chelating properties which allows it to bind with metal ions and may cause essential element deficiencies which interfere with normal enzymatic processes. Animal studies indicate that repeated exposure to EDTA may result in alterations in tissue metal distributions with secondary changes to the kidney, intestinal tract, and enzyme system function. At levels that were maternally toxic, EDTA has shown the ability to produce birth defects in the offspring.

In studies where zinc was supplemented, rats given up to 1000 mg/kg EDTA showed no increase in birth defects. Long-term administration of disodium and trisodium EDTA salts have not shown evidence for carcinogenicity. EDTA does not cause genetic changes in standard bacterial assays, but has shown weak activity in producing chromosomal mutations and chromosomal aberrations in mammalian cell assays. Workers exposed to EDTA and other materials did not have increased chromosomal aberrations in circulating white blood cells. EDTA and salts are used in medical therapy as anticoagulants and detoxicants for heavy metal poisoning.

Chronic Toxicity

There are no known carcinogenic chemicals in this product

Carcinogenicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Sodium hydroxide

Data from several species of fish showed a range of tolerance (brook trout - spotfin and Lake Emerald shiners - minnows - mosquitofish - goldfish) that was most likely related to changes in the pH produced by addition of sodium hydroxide to the water. The minimum lethal concentration for minnows, Mayfly larvae and Daphnia was 100 ppm and for Chironomus larvae 700 ppm. .

Octylphenoxy polyethoxyethanol

This material is highly toxic to *Seenastrum capricornutum* (96 hr LC50 0.21 mg/l); moderately toxic to trout (LC50 7.2 mg/l) and fathead minnow (96 hr LC50 8.9 mg/l) and slightly toxic to sheepshead minnow (96 hr LC50 32 mg/l) Daphnia magna (48 hr EC50 21 mg/l) and practically non-toxic to *Mysidopsis bahia* (96 hr LC50 320 mg/l) .

EDTA

This material is practically non-toxic to bluegill sunfish (LC50 60-160 mg/l), fathead minnow (LC50 60-160 mg/l) and Daphnia magna (LC50 625 mg/l). It is slightly toxic to algae and protozoan (EC50 11-76 \mg/l) .

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of in accordance with all applicable federal, state, and local laws and regulations. .
Contaminated Packaging	Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
UN-No	1824
Packing Group	PG II
Reportable Quantity (RQ):	1,000 lbs (NaOH)

ICAO

UN-No	1824
Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
Packing Group	PG II

IATA

UN-No	1824
Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
Packing Group	PG II
ERG Code	8 L

IMDG/IMO

Proper Shipping Name	Sodium hydroxide solution
Hazard Class	8
UN-No	1824
Packing Group	PG II
EmS No.	F-A, S-B

15. REGULATORY INFORMATION

International Inventories

Sodium hydroxide	
DSL	Listed
EINECS/ELINCS	Listed
ENCS	Listed
CHINA	Listed
KECL	Listed
Octylphenoxy polyethoxyethanol	
DSL	Listed
ENCS	Listed
CHINA	Listed
KECL	Listed
Ethylene diamine tetraacetic acid	
DSL	Listed
EINECS/ELINCS	Listed
ENCS	Listed
CHINA	Listed
KECL	Listed

USA

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	No
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lbs			Listed.
Ethylene diamine tetraacetic acid	5000 lbs			Listed.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

CERCLA

Chemical Name	RQ
Sodium hydroxide	Listed.
Ethylene diamine tetraacetic acid	Listed.

RCRA

Pesticide Information

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium hydroxide	Listed.			Listed.	
Ethylene diamine tetraacetic acid	Listed.			Listed.	

International Regulations

Mexico - Grade Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

Chemical Name	NPRI
Octylphenoxy polyethoxyethanol	X

16. OTHER INFORMATION

Revision Date 14-Jan-2009

Revision Summary

Update section 15

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End of MSDS