



Safety Data Sheet

Preparation Date 07-Apr-2015

Revision date 11-Dec-2015

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Description: FRUIT & VEGETABLE KLEEN® 440

Other means of identification

Item#: 24-440
UN-No 1824
Synonyms Not Available

Recommended use of the chemical and restrictions on use

Recommended use Alkaline cleaner.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Manufacturer Address

DECCO
Decco U.S. Post Harvest, Inc.
1713 S. California Ave.
Monrovia, CA 91016-0120

Emergency telephone number

Company Phone Number 626-358-1838
8:00 am - 5:00 pm (PST)
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center
(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

hazard statements

Causes severe skin burns and eye damage



appearance clear light brown

Physical state liquid

Odor No information available

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse continuously 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: 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

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Sodium hydroxide	1310-73-2	1-20	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

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. Remove and wash contaminated clothing before re-use.
Inhalation	If breathing is irregular or stopped, administer artificial respiration. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center immediately. Clean mouth with water. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician No information available.

5. Fire-fighting measures

Suitable extinguishing media

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

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Avoid breathing fumes from fire exposed material. Nitrous oxides. ammonia vapors.

Explosion data

Protective equipment and precautions for firefighters

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

Environmental Precautions

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 and material for containment and cleaning up

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

Precautions for safe handling

Handling Keep out of reach of children. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Store in cool/well-ventilated place.

incompatible materials Strong acids. Incompatible with oxidizing agents. Avoid contact with zinc, aluminum, tin, bronze, lead, wool and leather. Avoid combustible materials, halogen compounds, anhydrides.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	ACGIH TLV	OSHA PEL
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³

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.

Personal protective equipment

Eye/Face Protection

Avoid contact with eyes. Goggles. Where there is potential for eye contact have eye flushing equipment available.

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	liquid	Odor	No information available
appearance	clear light brown		
color	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	12	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point		
Evaporation Rate	No information available	
flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.1	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	9.18 lbs/gal

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Keep away from children.

incompatible materials

Strong acids. Incompatible with oxidizing agents. Avoid contact with zinc, aluminum, tin, bronze, lead, wool and leather. Avoid combustible materials, halogen compounds, anhydrides.

Hazardous decomposition products

Nitrogen oxides (NOx). Ammonical vapors.

11. Toxicological Information

Information on Likely Routes of Exposure

Inhalation	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Component Information

Sodium hydroxide

Single exposure studies indicate that this material is slightly toxic if absorbed through the skin (rat LD50 1,350 mg/kg, dry NaOH) 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 of exposures were reported in an epidemiologic study of a small group of workers exposed to caustic dust for 30 years or more. 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.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg (Rabbit)	-

Information on Toxicological Effects

Symptoms No information available.

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

sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - No information available

12. Ecological Information

ecotoxicity

No information available

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

No information available.

Other Adverse Effects

No information available

13. Disposal Considerations**Waste Treatment Methods****Waste Disposal Method** Dispose of in accordance with all applicable federal, state, and local laws and regulations.**Contaminated packaging** Do not reuse empty containers.

Chemical name	Sodium hydroxide
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14. Transport Information**DOT**

UN-No	1824
Proper shipping name	Sodium hydroxide solution
Hazard class	8
Packing group	PG III
Reportable Quantity (RQ):	1,000 lbs (NaOH)

ICAO

UN-No	1824
Proper shipping name	Sodium hydroxide solution
Hazard class	8
Packing group	PG III

IATA

UN-No	1824
Proper shipping name	Sodium hydroxide solution
Hazard class	8
Packing group	PG III

IMDG/IMO

UN-No	1824
Proper shipping name	Sodium hydroxide solution
Hazard class	8
Packing group	PG III
EmS No.	F-A,S-B

15. Regulatory Information**International Inventories**

USINV	Not determined
DSL/NDL	Not determined
EINECS/	Does not comply

ELINCS	
ENCS	Does not comply
China	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

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

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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

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

Acute health hazard	yes
Chronic health hazard	NO
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide 1310-73-2	1000 lb			X

Chemical name	RQ	CERCLA EHS RQs	RQ
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

CERCLA

Component	RQ
Sodium hydroxide 1310-73-2 (1-20)	1000 lb

RCRA

Pesticide Information

State Regulations

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium hydroxide	X	X	X		

International regulations

U.S. EPA Label information

EPA Pesticide registration number Not applied

16. Other Information

NFPA HEALTH 3 flammability 0 Instability 0 Physical hazard -

Preparation Date 07-Apr-2015
Revision date 11-Dec-2015

Revision Summary

Update Section 9 Update section 12

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NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return product at once, unopened, and the purchase price will be refunded. It is impossible to eliminate all risks associated with the use of this product. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Decco US Post-Harvest, Inc. harmless from any claims relating to such factors.

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