



Safety Data Sheet

Preparation Date 26-Mar-2015

Revision date 16-Dec-2015

Revision Number: 3

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

Product identifier

Product Description: DECCO Apl Lustr 225

Other means of identification

Item#: 13-225

Recommended use of the chemical and restrictions on use

Recommended use Apple wax coating.

Uses advised against No information available

Details of the Supplier of the Safety Data Sheet

Supplier 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 2
Serious eye damage/eye irritation	Category 2
FLAMMABLE LIQUIDS	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard Statements

CAUSES SKIN IRRITATION

Causes serious eye irritation

Flammable liquid and vapor



Appearance amber

Physical state Liquid

Odor Alcohol odor

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not spray on an open flame or other ignition source
 Keep only in original container
 Ground/bond container and receiving equipment
 Take precautionary measures against static discharge

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 If skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Potassium hydroxide	1310-58-3	0-20	
Ammonium hydroxide	1336-21-6	0-20	
Isopropanol	67-63-0	0-20	

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 15 - 20 minutes. Remove contact lenses, if present, after 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 a poison control center or doctor for treatment advice.
Inhalation	Move to fresh air. MAY CAUSE ALLERGIC RESPIRATORY REACTION. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a physician or poison control center for treatment advice. May produce an allergic reaction. 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 Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

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

Unsuitable extinguishing media Decomposition by contact with water may generate vapours which can be ignited by heat or open flame.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon monoxide. Oxides of nitrogen. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.

Explosion data

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 Remove all sources of ignition. Avoid contact with skin and eyes. Use personal protective equipment. Take precautionary measures against static discharges.

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 Remove all ignition sources. Use non-sparking tools. 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. Ground and bond containers when transferring material. Take precautionary measures against static discharges.

7. Handling and Storage

Precautions for safe handling

Handling Keep out of reach of children. Remove all sources of ignition. Wear personal protective equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Check that all equipment is properly bonded and grounded. Empty containers may contain hazardous residues. Avoid contact with skin and eyes. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Keep out of the reach of children. Keep away from heat and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place.

incompatible materials Acids. Strong bases.

8. Exposure Controls/Personal Protection

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Potassium hydroxide	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³
Isopropanol	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 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

Goggles. If splashes are likely to occur, wear:. Eye/Face Protection.

Skin protection

Rubber gloves. Wear protective gloves/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

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	amber	Odor	Alcohol odor
color	No information available		

Property

VALUES

Remarks/ • Method

pH	8.5	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	24 °C / 75 °F	Pensky Martin Closed Cup
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	1.01	
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 8.42 lb/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 open flames, hot surfaces and sources of ignition. Keep away from children.

incompatible materials

Acids. Strong bases.

Hazardous decomposition products

Carbon monoxide. Nitrogen oxides (NOx).

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

Isopropanol: No skin irritation was reported in humans following a single 24 hour exposure. Low doses (2.6 and 6.4 mg) given daily to human volunteers orally for 6 weeks was without adverse effects on the blood. Signs of toxicity in rodents following single oral or inhalation exposures included sensory irritation, liver effects, narcosis and CNS depression. Skin irritation and injury were observed in rabbits following repeated skin application, while sensory irritation, liver and kidney changes and narcosis were observed in rats and mice following repeated inhalation. No signs of nervous system toxicity were observed in rats or mice following repeated inhalation in rats following repeated administration in drinking water. No adverse effects were observed in dogs following repeated administration in drinking, while a decrease in body weight gain was the only adverse effect reported in rats. Long-term skin application produced no skin tumors in mice. No increase in lung tumors occurred in mice after long-term inhalation. No signs of neurotoxicity or developmental toxicity were noted in the offspring of rats exposed orally during pregnancy. No birth defects were noted in the offspring of rats and rabbits exposed orally during pregnancy, even at amounts which produced toxic effects in the mothers and offspring. Birth defects were reported in the offspring of rats exposed by inhalation during pregnancy, but only at levels which produced significant adverse effects on the mothers. No genetic changes were observed in tests using bacteria or animal cells or animals. Single exposure studies indicate that this material is slightly to practically non-toxic if swallowed (rat LD50 4,475-7,990 mg/kg) practically non-toxic if absorbed through the skin (rabbit LD50 6,300-13,000 mg/kg) or inhaled (rat 8 hr LC50 51 mg/l), moderately irritating to rabbit eyes (15.8-27/110) and slightly irritating to rabbit skin (4 hr exposure 2/8) Potassium hydroxide Solutions are highly alkaline and are able to rapidly dissolve and destroy tissue upon contact. There are numerous reports of accidental or suicidal ingestion

of this material. Death results from shock, perforation of the esophagus, pneumonitis and infection. There are also reports of accidental splashed to the eyes and skin causing corrosive tissue damage. Repeated overexposure by inhalation is usually self-limited by sneezing, causing coughing and respiratory discomfort; however, lesions of the nasal septum have been reported from workplace exposure. Long-term application to the skin of mice has resulted in increased skin tumor formation. Single exposure studies indicate that this material is moderately toxic if swallowed (rat LD50 273-388 mg/kg) and corrosive to rabbit eyes and skin.

Ammonium hydroxide

Single exposure studies indicate that this material is slightly toxic if swallowed (rat LD50 700 mg/kg, 1% solution) and corrosive to eyes and skin. Moderate skin irritation was reported in human volunteers following 4 hr contact with a 10% solution. Skin contact with a 50% solution resulted in painless blisters in 6-12 minutes. Following repeated inhalation in rats, mild nasal discharge, eye irritation, corneal opacities, lung inflammation and death were observed. Life-time administration in drinking water produced no increased incidence of tumors in two strains of mice. Additionally, no increase in tumors was noted in life-time inhalation studies in mice. No birth defects were noted in the offspring of rats following skin applications of hair dye formulations containing 9-29% of this material during pregnancy. Weak genetic changes were observed in tests using bacteria.

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 The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Isopropanol 67-63-0	-	Group 3		-

Reproductive effects Not Available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Target organ effects Respiratory System, EYES, skin.

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

Bioaccumulative potential.

Chemical name	Log Pow
Potassium hydroxide 1310-58-3	0.65 0.83
Isopropanol 67-63-0	0.05

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. Do not apply directly to wetlands or water.

Contaminated packaging Do not reuse empty containers.

Chemical name	Potassium hydroxide
Ammonium hydroxide	Isopropanol

14. Transport Information

DOT Not regulated as per 173.150 (e) of 49 CFR.

ICAO

UN-No 1866
Proper shipping name Resin solution
Hazard class 3
Packing group PG III

IATA

UN-No 1866
Proper shipping name Resin solution
Hazard class 3
Packing group PG III

IMDG/IMO

UN-No 1866
Proper shipping name Resin solution
Hazard class 3
Packing group PG III
EmS No. F-E,S-E

15. Regulatory Information

International Inventories

USINV Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Does not comply
China Complies
KECL Complies
PICCS Complies
AICS Complies
TSCA Complies

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
IECS - 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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and 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	yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide 1310-58-3	1000 lb			X
Ammonium hydroxide 1336-21-6	1000 lb			X

Chemical name	RQ	CERCLA EHS RQs	RQ
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Ammonium hydroxide 1336-21-6	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

CERCLA

Component	RQ
Potassium hydroxide 1310-58-3 (0-20)	1000 lb
Ammonium hydroxide 1336-21-6 (0-20)	1000 lb

SARA Product RQ 0

RCRA

Pesticide Information

State Regulations

State Right-to-Know

International regulations

U.S. EPA Label information

EPA Pesticide registration number Not applied

16. Other Information

NFPA HEALTH 2 flammability 3 Instability 0 Physical hazard -

Preparation Date 26-Mar-2015

Revision date 16-Dec-2015

Revision Summary

Update Section 9 Update section 12

Disclaimer

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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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