



Safety Data Sheet

Preparation Date 07-Apr-2015

Revision date 01-Dec-2015

Revision Number: 2

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

Product identifier

Product Description: APL-LUSTR® 221

Other means of identification

Item#: 24-221

Synonyms Not Available

Recommended use of the chemical and restrictions on use

Recommended use Apple wax coating.

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 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
FLAMMABLE LIQUIDS	Category 3

Label elements

EMERGENCY OVERVIEW

WARNING

hazard statements

CAUSES SKIN IRRITATION

Causes serious eye irritation

May cause drowsiness or dizziness

Flammable liquid and vapor



appearance brown**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 get in eyes, on skin, or on clothing
Use only outdoors or in a well-ventilated area
Do not spray on an open flame or other ignition source
Keep only in original container
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/... /equipment
Take precautionary measures against static discharge
Take precautionary measures against static discharge
Ground/bond container and receiving equipment

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Store locked up

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
Ammonium hydroxide	1336-21-6	1-20	
Isopropanol	67-63-0	5-40	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures**FIRST AID MEASURES****General advice**

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye contact

If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Skin contact

Immediate medical attention is not required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation	Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water afterwards. Do not induce vomiting without medical advice. Call a physician.

Protection of First-aiders Use personal protective equipment.

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: Dry chemical. Carbon dioxide (CO₂). Water spray. alcohol-resistant foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Hazardous combustion products Carbon monoxide. Oxides of nitrogen.

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 Remove all sources of ignition. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labelled containers. Take precautionary measures against static discharges.

7. Handling and Storage

Precautions for safe handling

Handling To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Keep away from open flames, hot surfaces and sources of ignition. Wear personal protective equipment. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Use product only in closed system.

Conditions for safe storage, including any incompatibilities

Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers.
incompatible materials	Acids. Strong bases.

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.
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Chemical name	ACGIH TLV	OSHA PEL
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	Ensure adequate ventilation, especially in confined areas.
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Personal protective equipment

Eye/Face Protection	Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.
Skin protection	Long sleeved clothing. Chemical resistant apron. Antistatic boots. Impervious butyl rubber gloves.
Respiratory protection	Wear a positive-pressure supplied-air respirator.

General hygiene considerations

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

9. Physical and Chemical Properties**Information on basic physical and chemical properties**

Physical state	liquid	Odor	Alcohol odor
appearance	brown		
color	No information available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	8.5	
Melting point/freezing point	No information available	
Boiling Point/Range	82 °C / 180 °F	
Flash Point	24 °C / 75 °F	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	0.997	
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	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under normal conditions. Hazardous polymerisation does not occur.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heating in air.

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) 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.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium hydroxide 1336-21-6	= 350 mg/kg (Rat)	-	-
Isopropanol 67-63-0	= 4396 mg/kg (Rat)	12800 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h

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.

Chronic toxicity Avoid repeated exposure.

Target organ effects Respiratory System, EYES, skin.

Aspiration hazard No information available.

Numerical Measures of Toxicity - No information available

The following values are calculated based on chapter 3.1 of the GHS document . 1082.7 mg/kg (rat) 2768 mg/kg (rat)
62.91632 mg/l (mist) (dust) mg/m³ 62.91632

12. Ecological Information

ecotoxicity

No information available

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Isopropanol 67-63-0	0.05

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Chemical name	Ammonium hydroxide
Isopropanol	

14. Transport Information

DOT

Not regulated as per 173.150 (e) of 49 CFR. When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.

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	Not determined
DSL/NDL	Not determined
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

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 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	SARA 313 - Threshold Values
Isopropanol - 67-63-0	1.0

SARA 311/312 Hazardous**Categorization**

Acute health hazard	yes
Chronic health hazard	yes
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
Ammonium hydroxide 1336-21-6	1000 lb			X

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

CERCLA

Component	RQ
Ammonium hydroxide 1336-21-6 (1-20)	1000 lb

RCRA**Pesticide Information****State Regulations****State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ammonium hydroxide	X	X	X		
Isopropanol	X	X	X		

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 07-Apr-2015

Revision date 01-Dec-2015

Revision Summary

Update section 3 Update Section 9 Update section 12

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