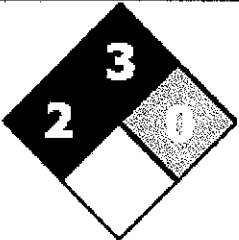







# Material Safety Data Sheet

NFPA	PPE		
			

Issued Date 08-Feb-2007

Revision Date 13-Jan-2009

Revision Number: 5

13-225 - DECCO Apl Lustr 225

## 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 Apl Lustr 225

Recommended Use

Apple wax coating

Product Code

13-225

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

Flammable Liquid  
May cause eye and skin irritation  
May be harmful if inhaled.

**WARNING!**
Appearance Amber.

Physical State Liquid.

Odor Alcohol odor.

Potential Health Effects

- Inhalation
- Skin contact

**Acute Effects**

Data on component(s) is provided below:

**Isopropanol:**

Prolonged or repeated contact removes oils from the skin and may dry skin causing irritation, redness and rash. High vapor concentrations may be irritating to the eyes and respiratory tract, and may result in CNS effects such as headache, dizziness, nausea, drowsiness and, in severe exposures, loss of consciousness. If swallowed, this material may cause digestive tract irritation, vomiting and CNS effects as noted above. Mild to severe lung injury may occur if this material is drawn into the lungs (aspirated) during swallowing, or during vomiting after swallowing. Symptoms of injury may include increased breathing and heart rate, coughing and related signs of respiratory distress.

**Ammonium hydroxide**

Based on single exposure it is considered to be slightly toxic if swallowed and corrosive to eyes and skin. Concentrated solutions are strongly alkaline and can cause corrosive

damage to skin and eyes; swallowing can cause severe burns and hemorrhage of the upper digestive tract. Esophageal burns have been reported after swallowing of 10% solutions. Strong solutions may also emit vapors or gas. Inhalation can cause coughing, shortness of breath, laryngitis, bronchitis, chest pains and severe respiratory problems. Swelling of the larynx and glottis can lead to respiratory obstruction. The gas can produce burning of the eyes, lacrimation, and severe eye damage leading to blindness. Medical conditions which may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

#### Potassium hydroxide

Based on single exposure studies it is considered to be moderately toxic if swallowed. This material is corrosive to all body tissues and some delay between contact and irritant sensitization may occur. Inhalation exposure of mist may cause eye and upper respiratory tract irritation and, in severe cases, delayed pulmonary edema and death. Repeated overexposure by inhalation is usually self-limited by sneezing, coughing and respiratory discomfort; however, lesions of the nasal septum have been reported from workplace exposure. Accidental swallowing may cause severe burns and tissue perforation of the mucous membranes of the mouth, throat, esophagus and stomach.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Potassium hydroxide	1310-58-3	1.2	N/A
Ammonium hydroxide	1336-21-6	1.4	N/A
Isopropanol	67-63-0	8	980 mg/m <sup>3</sup> 400 ppm

### 4. 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 poison control center or doctor for treatment advice.

#### Inhalation

Move 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 for treatment advice.  
Have person sip a glass of water if able to swallow  
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

Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

#### Flammable Explosive Properties

#### Flash Point

75°F

#### Method

Pensky Martin Closed Cup

#### Autoignition Temperature

Not available

<b>Flammability Limits in Air</b>	Not available
<b>Extinguishing Media</b>	Use: Dry chemical, Foam, Carbon dioxide (CO2).
<b>Fire/Explosion Hazard</b>	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.
<b>Hazardous Combustion Products</b>	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. .
<b>NFPA</b>	<b>Health 2</b> <b>Flammability 3</b> <b>Instability 0</b>

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Remove all sources of ignition. Avoid contact with the skin and the eyes. Use personal protective equipment. Take precautionary measures against static discharges.
<b>Environmental Precautions</b>	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..
<b>Methods for Clean-up</b>	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

<b>Handling</b>	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.
<b>Storage</b>	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.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL
Ammonium hydroxide	25 ppm	
Isopropanol	200 ppm	980 mg/m <sup>3</sup> 400 ppm

<b>Engineering Controls</b>	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. .
<b>Personal Protective Equipment</b>	Goggles. If splashes are likely to occur, wear.. Eye/face Protection.
<b>Eye/face Protection</b>	Rubber gloves. Wear protective gloves/clothing.
<b>Skin Protection</b>	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
<b>Respiratory Protection</b>	

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

Appearance	Amber	Odor	Alcohol odor
Physical State	Liquid	pH	approx.8.5
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	1.01 g/cc	Solubility	Not available
Evaporation Rate	Not available	Vapor Pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	12 cps (+/-5)	Molecular Weight	No data available
Bulk Density	8.428 lb/gal	Percent Solids	18.50 (+/-5)
Percent Volatiles	Not available		

## 10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
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).
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

### 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 of 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.

### Chronic Toxicity

There are no known carcinogenic chemicals in this product

### Carcinogenicity

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Potassium hydroxide

This material is highly toxic to *Gambusia* (LC50 80 mg/l)..

#### Isopropanol:

This material is practically non-toxic to *Daphnia magna* (48 hr ec50 2,285 mg/l), fruit fly (48 hr - LC50 10,200 mg/l), fathead minnow (96 hr LC50 3,200-9,640 mg/l), brown shrimp (96 hr LC50 1,150 mg/l), rainbow trout (96 hr LC50 7,600 mg/l), sheephead minnow (96 hr LC50 12,100 mg/l) and mysid shrimp (96 hr LC50 4,050 mg/l).

#### Chem Fate:

This material will rapidly photooxidize in the atmosphere. It has been shown to be rapidly biodegradable in adapted activated sludge and fresh and salt waste water dilutions (5 day BOD in adapted sludge 99%, 20-day BOD in unadapted sludge 70-78% in fresh water and 72% in salt water). The log Pow is 0.14.

#### Ammonium hydroxide

This material is part of the nitrogen cycle in the environment. Large spills will rapidly disperse and do not persist. This material in air will undergo a variety of reactions such as photolytic reactions or reactions with sulfur dioxide or ozone. In water, it undergoes microbial nitrification and is assimilated by aquatic plants or is transferred to sediments or volatilized. In soil, the cation is adsorbed on positively charged clay particles and is relatively immobile. Most undergoes nitrification and the resulting nitrate ion is removed by leaching or by root uptake. .

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	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..
<b>Contaminated Packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

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

**ICAO**

<b>UN-No</b>	1866
<b>Proper Shipping Name</b>	Resin solution
<b>Hazard Class</b>	3
<b>Packing Group</b>	PG III

**IATA**

<b>UN-No</b>	1866
<b>Proper Shipping Name</b>	Resin solution
<b>Hazard Class</b>	3
<b>Packing Group</b>	PG III
<b>ERG Code</b>	3L

**IMDG/IMO**

<b>Proper Shipping Name</b>	Resin solution
<b>Hazard Class</b>	3
<b>UN-No</b>	1866
<b>Packing Group</b>	PG III
<b>EmS No.</b>	F-E,S-E

## 15. REGULATORY INFORMATION

### International Inventories

Potassium hydroxide	
<b>DSL</b>	Listed
<b>EINECS/ELINCS</b>	Listed
<b>ENCS</b>	Listed
<b>CHINA</b>	Listed
<b>KECL</b>	Listed
Ammonium hydroxide	
<b>DSL</b>	Listed
<b>EINECS/ELINCS</b>	Listed
<b>ENCS</b>	Listed
<b>CHINA</b>	Listed
<b>KECL</b>	Listed
Isopropanol	
<b>DSL</b>	Listed
<b>EINECS/ELINCS</b>	Listed
<b>ENCS</b>	Listed
<b>CHINA</b>	Listed
<b>KECL</b>	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 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	Yes
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
Potassium hydroxide	1000 lbs			Listed.
Ammonium hydroxide	1000 lbs			Listed.

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

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Isopropanol	67-63-0	8		Listed.		

**CERCLA**

Chemical Name	RQ
Potassium hydroxide	Listed.
Ammonium hydroxide	Listed.
Isopropanol	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
Potassium hydroxide	Listed.	Substance no. 1571 Listed.	Listed.	Listed.	Listed.
Ammonium hydroxide	Listed.			Listed.	
Isopropanol	Listed.		Listed.	Listed.	Listed.

**International Regulations**

**Mexico - Grade** Not available

Chemical Name	Category	Carcinogen Status	Exposure Limits
Ammonium hydroxide			18 mg/m <sup>3</sup>
Isopropanol			980 mg/m <sup>3</sup>

**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
Isopropanol	X

**16. OTHER INFORMATION**

**Revision Date**

13-Jan-2009

**Revision Summary**

Update section 15

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End of MSDS