

## SAFETY DATA SHEET

ISSUANCE DATE: January 23, 2018

SDS # 30-21-006-1

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

L'Oreal USA Products, Inc.  
133 Terminal Avenue  
Clark, NJ 07066

L'Oreal Canada  
4895 rue Hickmore  
Ville St-Laurent, H4T 1K5  
Canada

**Emergency Telephone Number:**

1-800-535-5053 (International: 352-323-3500)  
In Canada – 1-613-996-6666 (Canutec) (\*666 cellular)

**For further information:**

1-732-499-2741

**Poison Control Number:** 412-390-3326



**Product Name:** Redken Shades EQ Shades 04CB, 05CB, 06CB, 04NA, 05NA, 06NA, 07NA, 08NA, 09NA, 05RB, 06RR, 07RR, 04RV


**Recommendations on use:** Personal care product to be mixed with companion product(s) in accordance with instructions and applied to hair to aid in coloring.

**Restrictions on use:** Avoid fire, flame, heat and other sources of ignition. For external use only. Keep away from contact with eyes. Use only as directed. Liquid dispensed from the container is considered flammable until dry.

### SECTION 2: HAZARDS IDENTIFICATION

**Signal Word:** DANGER

Symbol	Classification	Hazard Statement	Prevention Statements
	Flammable Liquids Category 3	Flammable liquid and vapor	<ul style="list-style-type: none"> <li>Keep away from heat, sparks, open flames and hot surfaces. No smoking.</li> <li>Keep container tightly closed.</li> <li>Ground/bond container and receiving equipment.</li> <li>Use explosion-proof electrical, ventilating, lighting, manufacturing and packaging equipment.</li> <li>Use only non-sparking tools.</li> <li>Take precautionary measures against static discharge.</li> </ul>
	Eye Damage Category 1	Causes serious eye damage	<ul style="list-style-type: none"> <li>Wear eye/face protection appropriate for the manufacturing operation being performed (goggles or face shield).</li> </ul>

	Skin Sensitizer Category 1	May cause an allergic skin reaction	<ul style="list-style-type: none"> <li>• Avoid breathing mist/vapors.</li> <li>• Contaminated work clothing must not be allowed out of the workplace.</li> <li>• Wear nitrile or vinyl protective gloves.</li> </ul>
No symbol required	Skin Irritation Category 2	Cause skin irritation	<ul style="list-style-type: none"> <li>• Wash hands thoroughly after handling.</li> <li>• Wear nitrile or vinyl protective gloves.</li> </ul>

This material is considered hazardous by the US Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200)

General Precautionary Statements: Keep out of reach of children. Read label before use.

Hazards Not Otherwise Classified: None

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Only hazardous constituents associated with the product are listed below**

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Isopropyl Alcohol	67-63-0	≤ 10.0%
Sodium C14-16 Olefin Sulfonate	68439-57-6	≤ 9.0%
Deceth-3	66455-15-0	≤ 8.1%
Cocamide MIPA	68333-82-4	≤ 6.5%

**Ingredients listed below may only be contained in some shades:**

Toluene-2,5-diamine	95-70-5	≤ 0.9%
p-Aminophenol	123-30-8	≤ 0.6%
1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate	155601-30-2	≤ 0.5%
Resorcinol	108-46-3	≤ 0.4%
m-Aminophenol	591-27-5	≤ 0.4%
4-Amino-2-Hydroxytoluene	2835-95-2	≤ 0.3%
6-Hydroxyindole	2380-86-1	≤ 0.3%

## **SECTION 4: FIRST AID MEASURES**

### **Response Statements:**

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing until material is sufficiently removed from the eye. **If eye irritation persists:** Immediately call a Poison Control Center or get medical advice/attention.

**IF ON SKIN:** Wash with plenty of water. Take off immediately all contaminated clothing. **If skin irritation occurs:** Get medical advice/attention. Wash contaminated clothing before reuse.



**Product Name:** Redken Shades EQ Shades 04CB, 05CB, 06CB, 04NA, 05NA, 06NA, 07NA, 08NA, 09NA, 05RB, 06RR, 07RR, 04RV

**IF INHALED:** Remove person to fresh air and keep in a position comfortable for breathing. Call a Poison Control Center if you feel unwell.

**IF SWALLOWED:** Do not induce vomiting. Never give anything by mouth to an unconscious individual. Consult a physician or Poison Control Center immediately.

**SYMPTOMS/EFFECTS:** Causes serious eye damage. May cause an allergic skin reaction. Causes skin irritation.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Consult product labeling. No special advice.

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## SECTION 5: FIRE-FIGHTING MEASURES

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### Notes for Non-Emergency Personnel:

**EXTINGUISHING MEDIA:** In case of fire: Use carbon dioxide, dry chemical and/or foam to extinguish. Water spray may be used to soak other materials surrounding the product, to prevent the spread of the fire. Selection of a fire extinguisher should also be appropriate to address the location of the fire and equipment involved. Please review the tools available at your location to ensure proper availability of equipment.

### Notes for those trained to participate in an emergency:

**SPECIAL FIRE FIGHTING PROCEDURES:** Treat as flammable liquid. Follow National Fire Protection Association Guidelines or local guidelines appropriate for emergency response. Minimize all sources of static electricity.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Observe all appropriate precautions for handling flammable materials.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### Notes for non-emergency personnel:

Consult trained response personnel for clean-up of large spills or locations where providing preliminary control of the chemical release is hazardous. Hazardous locations include areas where ignition sources cannot be controlled. Isolate the area and deny entry to unnecessary and unprotected personnel. Sections 2, 5, 7 and 8 of this document should be consulted upon use of material, to become knowledgeable of the material's hazards and how to control risks associated with handling flammable liquids.

If the location is not hazardous and only a small amount of material is released, control the spill using absorbent pads while wearing the protective equipment as noted below. Clean the area with detergent and water. Prohibit discharge to drains, soil, surface and ground waters. Dispose in accordance with Section 13 of this document.

**PERSONAL PROTECTIVE EQUIPMENT:** Nitrile or vinyl gloves, safety glasses/goggles, protective clothing (e.g. apron) may be required for clean-up of large spills. Respiratory protection is typically not necessary, but may be used depending upon the size of the spill and occupational exposure limits. Respiratory protection may include the use of organic vapor cartridges. Refer to Section 8 for additional information.

### Notes for those trained to participate in an emergency:

**ACCIDENTAL RELEASE MEASURES:** Eliminate all sources of ignition. Dike and contain the free liquid and absorb on vermiculite or spill pillows/pads. Place spent absorbents in UN specification drums for disposal. All precautions associated with controlling a flammable liquid should be employed during clean-up. Wash area completely with water. Take care to avoid contact with wet surfaces or walkways that may become slick when residue is present. Prohibit discharge to drains, soil, surface and ground waters.

Recommendations for personal protective equipment selection are noted above. Non-sparking tools should be utilized in all clean-up associated with flammable liquids. Dispose in accordance with section 13 of this document.

## SECTION 7: HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING:

Do not eat, drink or smoke while working with hazardous materials. Employees should be advised to wear appropriate protective equipment in the manufacturing environment. See section 8 of this document for protective equipment selection. Do not expose to heat or flame. All manufacturing should be performed indoors, in an enclosed environment free from uncontrolled ignition sources. Employees should be advised not to handle flammable products in close proximity to incompatible materials. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.

Maintain a clean work environment which includes use of properly functioning containers, proper housekeeping practices.

### CONDITIONS FOR SAFE STORAGE:

**Storage precautions for unpackaged product (manufacturing environment):** Store in a well-ventilated place and keep cool. Keep containers closed when not in use. Minimize inventory. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Appropriate fire suppression and detection equipment should be utilized. Store on spill pallets or other locations where spill containment will be easily accessible.

**Storage precautions for packaged product:** See consumer packaging.

Keep away from open drains and access to the environment.

**Incompatible materials:** Oxidizers, acids, bases. Store away from incompatible materials.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**CONTROL PARAMETERS:** These criteria have been published by the referenced authority to establish exposure limits in the work environment. Employee work areas should be monitored to ensure that permissible limits are not exceeded during the work day. These references do not coincide with product use. These references are meant to be in association with the manufacturing environment.

### OCCUPATIONAL EXPOSURE VALUES:

Component Name (CAS-No.)	Reference	TWA		STEL/CEILING	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Isopropyl Alcohol (67-63-0)	OSHA PEL	400	980	--	--
	ACGIH TLV	400	980	--	--
	NIOSH REL	400	980	500	1,225
Resorcinol (108-46-3)	OSHA PEL	--	--	--	--
	ACGIH TLV	10	45	20	90
	NIOSH REL	10	45	20	90

No occupational exposure values have been published for other constituents noted in Section 3.

**WORK HYGIENIC PRACTICES:** Ensure all work surfaces are maintained, to prevent contamination.

**ENGINEERING CONTROLS:** None required for product use. For handling large quantities of material, such as in the manufacturing of product, ventilation should be utilized. This ventilation should be compatible with the control of flammable materials. Exhaust ventilation should be utilized to maintain air concentrations of material below the occupational exposure guidelines noted above.

Local exhaust ventilation is not typically required for product use. For handling large quantities of material, such as in the manufacturing of product -- Local Exhaust: Explosion proof. Mechanical (general): Explosion proof.

**PERSONAL PROTECTIVE EQUIPMENT:** Consistent with good hygiene practices, personal protective equipment (PPE) should be used in conjunction with other control measures including engineering controls, ventilation and isolation. See also Section 5 of this document for PPE advice, in the event of an emergency.

**Eye/Face Protection (Non-Emergency):** None required for product use. For handling of large quantities of liquid material, safety glasses with side shields/goggles are recommended.

**Skin Protection (Non-Emergency):** None required for product use. For handling large quantities of material, such as in product manufacturing, nitrile or vinyl gloves should be considered for use. Tyvek clothing may also be suitable for handling large quantities of material in the manufacturing environment.

**Respiratory Protection (Non-Emergency):** Respiratory protection is not required for product use. For manufacturing of product, respiratory protection may be considered. Ensure that the respirator meets current local occupational health and safety standards. Organic vapor cartridges should be utilized with filtering respiratory protection.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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<b>APPEARANCE:</b>	Liquid – Shaded		
<b>ODOR:</b>	Not Available		
<b>ODOR THRESHOLD:</b>	Not Available		
<b>pH:</b>	9.5 – 10.5		
<b>MELTING/FREEZING POINT:</b>	<b>F:</b> Not Available	<b>C:</b> Not Available	
<b>BOILING POINT:</b>	<b>F:</b> >212	<b>C:</b> >100	
<b>FLASH POINT:</b>	<b>F:</b> 100.04	<b>C:</b> 37.8	<b>METHOD USED:</b> Closed cup
<b>FIRE POINT:</b>	<b>F:</b> 187.9	<b>C:</b> 86.6	<b>METHOD USED:</b> ISO 2592
<b>EVAPORATION RATE:</b>	Not Available (Butyl acetate = 1)		
<b>FLAMMABILITY:</b>	Not Applicable to Liquids		
<b>FLAMMABLE LIMITS IN AIR:</b>	Isopropyl Alcohol:	12.7% UEL	2.0% LEL
<b>VAPOR PRESSURE (mmHg):</b>	@ F: Not Available	@ C: Not Available	
<b>VAPOR DENSITY (AIR = 1):</b>	@ F: Not Available	@ C: Not Available	
<b>RELATIVE DENSITY (H2O = 1):</b>	Not Available		
<b>SOLUBILITY IN WATER:</b>	Not Available		



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**PARTITION COEFFICIENT:** Not Available

**AUTOIGNITION TEMPERATURE:** Not Available

**DECOMPOSITION TEMPERATURE:** Not Available

**VISCOSITY:** Not Available

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## SECTION 10: STABILITY AND REACTIVITY

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**REACTIVITY:** Material is not considered reactive under typical handling and storage conditions.

**STABILITY:** Product is stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:** None known. Hazardous polymerization is not expected to occur.

**CONDITIONS TO AVOID:** Heat, fire, flame and other sources of ignition.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizers, acids, and bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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Where information is not listed specifically for constituents, published information was not available.

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS:

**SKIN CORROSION/IRRITATION:** Causes skin irritation

**SERIOUS EYE DAMAGE/IRRITATION:** Causes serious eye damage

**RESPIRATORY/SKIN SENSITIZATION:** May cause an allergic skin reaction.

**INGESTION:** None expected

**INHALATION:** None expected

**ROUTES OF EXPOSURE:** Inhalation, eyes, skin, ingestion

**SYMPTOMS:** Causes serious eye damage. May cause an allergic skin reaction. Causes skin irritation.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** None known.

### ACUTE TOXICOLOGY DATA FOR COMPONENTS

Material	Route	Species	Test Results
Isopropyl Alcohol	Oral LD <sub>50</sub>	Rat (OECD 401 eq.)	5,840 mg/kg bw
Isopropyl Alcohol	Dermal LD <sub>50</sub>	Rabbit (OECD 402 eq.)	16,400 mL/kg bw
Isopropyl Alcohol	LC <sub>50</sub> (6h) Vapor	Rat (OECD 403 eq.)	> 25,000 mg/m <sup>3</sup> air
Sodium C14-16 Olefin Sulfate	Oral LD <sub>50</sub>	Rat (OECD 401)	2,079 mg/kg bw
Sodium C14-16 Olefin Sulfate	Dermal LD <sub>50</sub>	Rabbit (OECD 402 eq.)	6,300 mg/kg bw
Sodium C14-16 Olefin Sulfate	LC <sub>50</sub> (4 hr)	Rat (OECD 403 eq.)	> 52 mg/L air
Deceth-3	Oral LD <sub>50</sub>	Rat	> 2,000 mg/kg bw
Deceth-3	Dermal LD <sub>50</sub>	Rat (OECD 402)	> 2,000 mg/kg bw
Cocamide MIPA – RA	Oral LD <sub>50</sub>	Rat (OECD 401)	> 2,000 mg/kg bw



Material	Route	Species	Test Results
Toluene-2,5-diamine	Oral LD <sub>50</sub>	Rat (OECD 401 eq.)	102 mg/kg bw
p-Aminophenol	Oral LD <sub>50</sub>	Rat (OPPTS 870.1100)	671 mg/kg bw
p-Aminophenol	Dermal LD <sub>50</sub>	Rabbit (OPPTS 870.1200)	> 8,000 mg/kg bw
p-Aminophenol	Inh. LC <sub>50</sub> (4hr)	Rat (OECD 403 eq.)	> 3.42 mg/L air
1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate	Oral LD <sub>50</sub>	Rat (OECD 401)	> 2,000 mg/kg bw
1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate	Inh. LC <sub>50</sub> (4hr)	Rat (OECD 403) – Aero	> 5.24 g/m <sup>3</sup> air
Resorcinol	Oral LD <sub>50</sub>	Rat (OECD 401)	510 mg/kg bw
Resorcinol	Dermal LD <sub>50</sub>	Rabbit	3,360 mg/kg bw
Resorcinol	Inh. LC <sub>0</sub> (8hr)	Rat	> 2,800 mgm <sup>3</sup> air
m-Aminophenol	Oral LD <sub>50</sub>	Rat	924 mg/kg bw
m-Aminophenol	Inh. LC <sub>50</sub> (4hr)	Rat	1,162 mg/m <sup>3</sup> air
4-Amino-2-Hydroxytoluene	Oral LD <sub>50</sub>	Rat	3,600 mg/kg bw
4-Amino-2-Hydroxytoluene	Dermal LD <sub>50</sub>	Rabbit	> 5,000 mg/kg bw
6-Hydroxyindole	Oral LD <sub>50</sub>	Rat	600 - 1,200 mg/kg bw
6-Hydroxyindole	Dermal LD <sub>50</sub>	Rat (OECD 402)	> 2,000 mg/kg bw
6-Hydroxyindole	Inh. LC <sub>0</sub> (8hr)	Rat (OECD 403) – Aero	> 2,000 mg/m <sup>3</sup> air

**Note:** RA – Read Across to analogous substance

#### Skin Corrosion/Irritation:

<i>Isopropyl Alcohol:</i>	Not Irritating (Rabbit)
<i>Sodium C14-16 Olefin Sulfate:</i>	Irritating (Rabbit, OECD 404)
<i>Deceth-3:</i>	Slightly Irritating (Rabbit, OECD 404)
<i>Cocamide MIPA:</i>	Irritating (Rabbit, OECD 404) – RA
<i>Toluene-2,5-diamine:</i>	Not Irritating (RhE, OECD 439)
<i>p-Aminophenol:</i>	Slightly Irritating (Rabbit)
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	Slightly Irritating (Rabbit, OECD 404)
<i>Resorcinol:</i>	Irritating (100%), Not Irritating (2.5%) (Rabbit, OECD 404)
<i>m-Aminophenol:</i>	Not Irritating (Rabbit, OECD 404)
<i>4-Amino-2-Hydroxytoluene:</i>	Irritating (100%), Not Irritating (2.5%) (Rabbit)
<i>6-Hydroxyindole:</i>	Not Irritating (Rabbit, OECD 404)

#### Serious Eye Damage/Irritation:

<i>Isopropyl Alcohol:</i>	Severely Irritating (Rabbit, OECD 405 eq.)
<i>Sodium C14-16 Olefin Sulfate:</i>	Corrosive (Rabbit, OECD 405)
<i>Deceth-3:</i>	Corrosive (Rabbit, OECD 405)
<i>Cocamide MIPA:</i>	Corrosive (Rabbit, OECD 405) - RA
<i>Toluene-2,5-Diamine:</i>	Irritating (Rabbit, OECD 405)
<i>p-Aminophenol:</i>	Slightly Irritating (Rabbit, EPA OPPTS 870.2400)
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	Corrosive (Rabbit, OECD 405)
<i>Resorcinol:</i>	Corrosive (100%), Not Irritating (2.5%) (Rabbit, OECD 405)
<i>m-Aminophenol:</i>	Not Irritating (Rabbit, OECD 405)
<i>4-Amino-2-Hydroxytoluene:</i>	Irritating (100%), Not Irritating (2.5%) (Rabbit)
<i>6-Hydroxyindole:</i>	Severely Irritating (Rabbit, OECD 405)

#### Respiratory Irritation:

<i>Isopropyl Alcohol:</i>	Possibly Irritating (>400 ppm) (Rat)
<i>4-Amino-2-Hydroxytoluene:</i>	Irritating

**Skin Sensitization:**

<i>Isopropyl Alcohol:</i>	Not Sensitizing (Guinea Pig, OECD 406)
<i>Sodium C14-16 Olefin Sulfate:</i>	Not Sensitizing (Guinea Pig, OECD 406)
<i>Deceth-3:</i>	Not Sensitizing (Guinea Pig)
<i>Cocamide MIPA:</i>	Not Sensitizing (Guinea Pig, OECD 406)
<i>Toluene-2,5-Diamine:</i>	Sensitizing (Mouse, OECD 406)
<i>p-Aminophenol:</i>	Sensitizing (Guinea Pig, OECD 406 eq.)
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	Sensitizing (Guinea Pig, EU B.6)
<i>Resorcinol:</i>	Sensitizing (Mouse, OECD 429)
<i>m-Aminophenol:</i>	Sensitizing (Mouse, OECD 429)
<i>4-Amino-2-Hydroxytoluene:</i>	Sensitizing (Mouse, OECD 429)
<i>6-Hydroxyindole:</i>	Sensitizing (Mouse, OECD 429)

**CHRONIC HEALTH HAZARDS:**

**REPEAT DOSE TOXICITY:**

- NOAEL (Isopropyl Alcohol, Inhalation): 500 ppm (90d) (Rat)
- NOAEL (Sodium C14-16 Olefin Sulfate, oral): ≥ 259 mg/kg bw/day (104 wk) (Rat)
- NOAEL (Deceth-3, oral): 80 – 400 mg/kg bw/day (90d) (Rat, OECD 408)
- NOAEL (Deceth-3, dermal): 80 mg/kg bw/day (90d) (Rat, OECD 411)
- NOAEL (Cocamide MIPA, oral): >750 mg/kg bw/day (28d) (Rat, OECD 407 eq.) – RA
- NOAEL (Cocamide MIPA, dermal): 50 mg/kg bw/day (14wk) (Rat) – RA
- NOAEL (Toluene-2,5-diamine, oral): 10 mg/kg bw/d (90d) (Rat, OECD 408)
- NOAEL (p-Aminophenol, oral): 10 mg/kg bw/d (90d) (Rat, OECD 408)
- NOAEL (1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate, oral): 250 mg/kg bw/d (90d) (Rat, OECD 408)
- NOAEL (Resorcinol, oral): 80 mg/kg bw/d (90d) (Rat, OECD 408)
- NOAEL (m-Aminophenol, oral): 20 mg/kg bw/d (90d) (Rat, OECD 408)
- NOAEL (4-Amino-2-Hydroxytoluene, oral): 180 mg/kg bw/d (90d) (Rat)
- NOAEL (6-Hydroxyindole, oral): 100 mg/kg bw/d (90d) (Rat, OECD 408)

**CARCINOGENICITY:**

Component Name (CAS-No.)	OSHA	ACGIH	NTP	IARC
Isopropyl Alcohol (67-63-0)	--	TLV-A4	--	IARC-3
Resorcinol (108-46-3)	--	TLV-A4	--	IARC-3
Toluene-2,5-diamine	--	--	--	IARC-3

**Notes:** ACHIH TLV-A4 – This reference indicates that the material is “Not Classifiable as a Human Carcinogen”.  
IARC-3 - This reference indicates that the material is “Unclassifiable as to Carcinogenicity to Humans”.

**MUTAGENICITY:**

<i>Isopropyl Alcohol:</i>	A variety of <i>in vitro</i> and <i>in vivo</i> tests have produced negative results
<i>Sodium C14-16 Olefin Sulfate:</i>	A variety of <i>in vitro</i> tests have produced negative results
<i>Deceth-3:</i>	A variety of <i>in vitro</i> tests have produced negative results
<i>Cocamide MIPA:</i>	A variety of <i>in vitro</i> tests have produced negative results.
<i>Toluene-2,5-Diamine:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.
<i>p-Aminophenol:</i>	Varied results have been produced by both <i>in vitro</i> and <i>in vivo</i> tests.
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.
<i>Resorcinol:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.
<i>m-Aminophenol:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.
<i>4-Amino-2-Hydroxytoluene:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.
<i>6-Hydroxyindole:</i>	<i>In vitro</i> tests have produced varied results and <i>in vivo</i> tests negative results.



## REPRODUCTIVE TOXICITY:

<i>Isopropyl Alcohol:</i>	NOAEL: 1,000 mg/kg bw/d (Rat, OECD 416 eq.) – No effects on fertility
<i>Deceth-3:</i>	NOAEL: > 250 mg/kg bw/d (Rat, OECD 416)
<i>Toluene-2,5-diamine:</i>	NOAEL: ≥ 45 mg/kg bw/d (Rat, OECD 416)
<i>p-Aminophenol:</i>	NOAEL: 100 mg/kg bw/d (Rat, OECD 421)
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	NOAEL: 300 mg/kg bw/d (Rat, OECD 415)
<i>Resorcinol:</i>	NOAEL: 245 mg/kg bw/d (Rat, OECD 416) – No effects on fertility
<i>4-Amino-2-Hydroxytoluene:</i>	NOAEL: 200 mg/kg bw/d (Rat, OECD 415)

## DEVELOPMENTAL TOXICITY/TERATOGENICITY:

<i>Isopropyl Alcohol:</i>	NOAEL: 400 mg/kg bw/d (Rat, OECD 414) – No effects on development
<i>Sodium C14-16 Olefin Sulfate:</i>	NOAEL: ≥ 600 mg/kg bw/d (Rat, OECD 414 eq.)
<i>Deceth-3:</i>	NOAEL: > 250 mg/kg bw/d (Rat, OECD 416)
<i>Cocamide MIPA:</i>	NOAEL: >1,000 mg/kg bw/day (Rat, OECD 414) – No effects on development
<i>Toluene-2,5-diamine:</i>	NOAEL: 50 mg/kg bw/d (Rat, OECD 414 eq.)
<i>p-Aminophenol:</i>	NOAEL: 100 mg/kg bw/d (Rat, OECD 421)
<i>1-Hydroxyethyl 4,5-Diamino Pyrazole Sulfate:</i>	NOAEL: 300 mg/kg bw/d (Rat, OECD 414)
<i>Resorcinol:</i>	NOAEL: 250 mg/kg bw/d (Rat, OECD 414) – No effects on development
<i>m-Aminophenol:</i>	NOAEL: 100 mg/kg bw/d (Rat, OECD 414)
<i>4-Amino-2-Hydroxytoluene:</i>	NOAEL: 180 mg/kg bw/d (Rat)
<i>6-Hydroxyindole:</i>	NOAEL: 50 mg/kg bw/d (Rat)

## SECTION 12: ECOLOGICAL INFORMATION

Contact with the environment should be avoided. Spills and leaks should be immediately cleaned up and removed. All precautions should be taken to prevent contact with the environment. Published information regarding ingredients listed on this document area found below; where data is not listed, documentation was unavailable.

### ACUTE AND PROLONGED TOXICITY TO FISH

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Isopropyl Alcohol	LC <sub>50</sub> (OECD 203 eq.)	9,640 mg/L	Pimephales promelas	96 h
Sodium C14-16 Olefin Sulfate	LC <sub>50</sub> (OECD 203)	4.2 mg/L	Danio rerio	96 h
Deceth-3	LC <sub>50</sub>	11.5 mg/L	Oncorhynchus mykiss	96 h
Cocamide MIPA	LC <sub>50</sub> (QSAR)	2.7 mg/L	Fish	96 h
Toluene-2,5-diamine	LC <sub>50</sub> (OECD 203)	0.05 mg/L	Oryzias latipes	96 h
p-Aminophenol	LC <sub>50</sub> (OECD 203)	0.82 mg/L	Oryzias latipes	96 h
Resorcinol	LC <sub>50</sub>	26.8 mg/L	Pimephales promelas	96 h
m-Aminophenol	LC <sub>50</sub> (OECD 203)	82.64 mg/L	Danio rerio	96 h
6-Hydroxyindole	LC <sub>50</sub>	21.7 mg/L	Danio rerio	96 h

### ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Isopropyl Alcohol	EC <sub>50</sub> (OECD 202 eq.)	9,714 mg/L	Daphnia magna	24 h
Sodium C14-16 Olefin Sulfate	EC <sub>50</sub> (OECD 202)	4.53 mg/L	Ceriodaphnia sp.	48 h
Deceth-3	EC <sub>50</sub>	5.1 mg/L	Daphnia magna	48 h
Cocamide MIPA	EC <sub>50</sub> (OECD 202)	3.7 mg/L	Daphnia magna	48 h
Toluene-2,5-diamine	EC <sub>50</sub> (OECD 202)	0.491 mg/L	Daphnia magna	48 h
p-Aminophenol	EC <sub>50</sub> (OECD 202)	0.182 mg/L	Daphnia magna	48 h
Resorcinol	EC <sub>50</sub> (OECD 202)	1.0 mg/L	Daphnia magna	48 h
m-Aminophenol	EC <sub>50</sub> (DIN 38314 Pt.11)	1.1 mg/L	Daphnia magna	48 h
6-Hydroxyindole	EC <sub>50</sub>	1.74 mg/L	Daphnia magna	48 h

## TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Isopropyl Alcohol	EC <sub>50</sub>	> 1,000 mg/l	Scenedesmus subspicatus	72 h
Sodium C14-16 Olefin Sulfate	EC <sub>50</sub> (ISO 10253)	5.2 mg/L	Skeletonema costatum	72 h
Cocamide MIPA	EC <sub>50</sub> (OECD 201)	> 9.4 mg/L	Pseudokirchneriella subcapitata	72 h
Toluene-2,5-diamine	EC <sub>50</sub> (OECD 201)	1.02 mg/L	Pseudokirchneriella subcapitata	72 h
p-Aminophenol	EC <sub>50</sub> (OECD 201)	> 0.253 mg/l	Pseudokirchneriella subcapitata	72 h
Resorcinol	EC <sub>50</sub> (OECD 201)	> 97 mg/L	Pseudokirchneriella subcapitata	72 h
m-Aminophenol	EC <sub>50</sub> (OECD 201)	62 mg/L	Pseudokirchneriella subcapitata	72 h
6-Hydroxyindole	EC <sub>50</sub>	9.1 mg/L	Desmodesmus subspicatus	72 h

## TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Isopropyl Alcohol	EC <sub>50</sub> (DIN 38412, Pt. 8)	1,050 mg/L	Pseudomonas putida	16 h
Sodium C14-16 Olefin Sulfate	EC <sub>50</sub> (OECD 209)	230 mg/L	Activated sludge	3 h
Cocamide MIPA	EC <sub>50</sub> (OECD 209)	> 1,000 mg/L	Activated sludge	3 h
Toluene-2,5-diamine	EC <sub>50</sub> (OECD 202)	3.75	Activated sludge	3 h
p-Aminophenol	EC <sub>50</sub> (OECD 202)	29.9 mg/L	Activated sludge	3 h
Resorcinol	EC <sub>50</sub> (OECD 209)	79 mg/L	Activated Sludge	3 h
m-Aminophenol	IC <sub>50</sub>	361 mg/L	Tetrahymena pyriformis	40 h
6-Hydroxyindole	IC <sub>50</sub>	≥ 0.9 mg/L	Activated sludge	3 d

## PERSISTENCY AND DEGRADABILITY:

<i>Isopropyl Alcohol:</i>	Readily Biodegradable – 53% (5d) – EU Method C.5 eq.
<i>Sodium C14-16 Olefin Sulfate:</i>	Readily Biodegradable – 80% (28d) – OECD 301 B
<i>Deceth-3:</i>	Readily Biodegradable – OECD 301
<i>Cocamide MIPA:</i>	Readily Biodegradable – ISO 14593 eq. – 74% (28d)
<i>Toluene-2,5-diamine:</i>	Not Readily Biodegradable – 17% (28d) – OECD 301 D
<i>p-Aminophenol:</i>	Not Inherently Biodegradable – 6% (28d) – OECD 301 C
<i>Resorcinol</i>	Readily Biodegradable – 66.7% (14d) – OECD 301 C
<i>4-Amino-2-Hydroxytoluene:</i>	Not Readily Biodegradable
<i>6-Hydroxyindole:</i>	Not Readily Biodegradable

## BIOACCUMULATIVE POTENTIAL:

<i>Isopropyl Alcohol:</i>	log Pow: 0.05 – Not expected to bioaccumulate
<i>Sodium C14-16 Olefin Sulfate:</i>	log Pow: -1.3 (EU Method A.8); BCF: 70.8 – Not expected to bioaccumulate
<i>Deceth-3:</i>	Not expected to bioaccumulate
<i>Cocamide MIPA:</i>	log Pow: 3.77; BCF: 143 – Not expected to bioaccumulate
<i>Toluene-2,5-diamine:</i>	log Pow: -0.321 (EU Method A.8) – Not expected to bioaccumulate
<i>p-Aminophenol:</i>	log Pow: 0.04; BCF: 10-46 (OECD 305 C) – Not expected to bioaccumulate
<i>Resorcinol:</i>	log Pow: 0.8; BCF: 3.16 – Not expected to bioaccumulate
<i>m-Aminophenol:</i>	low Pow: 0.18 (EU Method A.8) – Not expected to bioaccumulate
<i>4-Amino-2-Hydroxytoluene:</i>	low Pow: -0.53 (EU Method A.8) – Not expected to bioaccumulate
<i>6-Hydroxyindole:</i>	low Pow: 1.46 (EU Method A.8) – Not expected to bioaccumulate

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## SECTION 13: DISPOSAL CONSIDERATIONS

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Those responsible for the performance of disposal, recycling or reclamation activities should refer to section 8 of this document for advice on personal protective equipment and exposure controls.

**WASTE DISPOSAL CONTAINERS:** Appropriate US DOT containers should be utilized which may include cardboard boxes for products, metal or plastic drums for liquids. These containers should meet the packaging specifications required for DOT compliance.

**WASTE DISPOSAL METHOD:** This product is ignitable (D001) RCRA hazardous wastes when intended for disposal. Controlled incineration at a hazardous waste facility is the recommended technology for treatment and disposal. This material must not be disposed through sewage.

**RCRA HAZARD CLASS: D001**

Follow all local governmental requirements intended for disposal.

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## SECTION 14: TRANSPORT INFORMATION

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### North American Ground Transportation

- **IN CONSUMER PACKAGING:** Limited Quantity/Consumer Commodity ( $\leq 5$  L)
  - UN ID Number:** UN 1266
  - Proper Shipping Name:** Perfumery products
  - Hazard Class:** 3
  - Packing Group:** III
  - Label Statements:** Exempt – Limited Quantity Marking Only
  
- **OTHER THAN CONSUMER PACKAGING:**
  - UN ID Number:** UN 1266
  - Proper Shipping Name:** Perfumery products
  - Hazard Class:** 3
  - Packing Group:** III
  - Label Statements:** Flammable Liquid (Class 3)

### Transport Via Water

- **IN CONSUMER PACKAGING:** Limited Quantity ( $\leq 5$  L)
  - UN ID Number:** UN 1266
  - Proper Shipping Name:** Perfumery products
  - Hazard Class:** 3
  - Packing Group:** III
  - Label Statements:** Exempt – Limited Quantity Marking Only
  
- **OTHER THAN CONSUMER PACKAGING:**
  - UN ID Number:** UN 1266
  - Proper Shipping Name:** Perfumery products
  - Hazard Class:** 3
  - Packing Group:** III
  - Label Statements:** Flammable Liquid (Class 3)

**Product Name: Redken Shades EQ Shades 04CB, 05CB, 06CB, 04NA, 05NA, 06NA, 07NA, 08NA, 09NA, 05RB, 06RR, 07RR, 04RV**

## Transport Via Air (Domestic/International)

- **IN CONSUMER PACKAGING:** Limited Quantity – ID 8000, Consumer Commodity ( $\leq 0.5$  L)  
**UN ID Number:** ID 8000  
**Proper Shipping Name:** Consumer Commodity  
**Hazard Class:** 9  
**Packing Group:** N/A  
**Label Statements:** Miscellaneous – Dangerous Goods & Limited Quantity Marking
- **OTHER THAN CONSUMER PACKAGING:**  
**UN ID Number:** UN 1266  
**Proper Shipping Name:** Perfumery products  
**Hazard Class:** 3  
**Packing Group:** III  
**Label Statements:** Flammable Liquid (Class 3)

Please be aware of carrier transport variations before shipping hazardous materials.

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## **SECTION 15: REGULATORY INFORMATION**

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**National Fire Protection Association Codes:** Health: 3 Fire: 2 Reactivity: 0 Other: None

**Workplace Hazardous Materials Identification System:** Class B, Division 2 – Flammable Material; Class E; Corrosive Material (Eye)

This regulatory information represents the product, in its consumer packaging.

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## **SECTION 16: OTHER INFORMATION**

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**PREPARATION INFORMATION:** This document replaces the version dated December 01, 2017 and all previous versions of safety data sheets related to this product.

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