

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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

L'Oreal Canada
4895 rue Hickmore
Ville St-Laurent, H4Y 1K5
Canada

Emergency Telephone Number

1-800-535-5053 US (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: High Volume (30 – 40 Vol.) Hair Developers

Recommendations on use: Personal care product to be mixed with companion products in accordance with instructions and applied to hair.

Restrictions on use: Refer to product insert/container for use warnings. For external use only. Use only as directed.

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: DANGER

Symbol	Classification	Hazard Statement	Prevention Statements
	Serious Eye Damage Category 1	Causes serious eye damage	<ul style="list-style-type: none"> Wash hands, face and all skin surfaces contacted thoroughly after handling. Wear eye protection appropriate for the manufacturing operation being performed (goggles or face shield).
	Oxidizing Liquid Category 3	May intensify fire, oxidizer	<ul style="list-style-type: none"> Keep away from heat. Keep/Storage away from combustibles (e.g. paper), organics, and metals (e.g. iron). Take precaution to avoid mixing with combustible and organic materials. Wear nitrile or vinyl gloves.

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 insert/label before use. Over-exposure may cause skin dryness or slight irritation. Prolonged contact may lighten skin.

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>
Hydrogen Peroxide	7722-84-1	9 – 12%

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: If skin irritation occurs: Wash with plenty of water. Remove all contaminated clothing and launder before reuse. **If skin irritation persists:** Get medical attention. In cases where discomfort persists and/or medical attention is sought, do not use hair color products until the nature of the skin reaction and the causative agent has been identified.

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. Over-exposure may cause skin dryness or slight irritation.

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

SECTION 5: FIRE-FIGHTING MEASURES

Notes for Non-Emergency Personnel:

EXTINGUISHING MEDIA: In case of fire: Use carbon dioxide, dry chemical, foam and/or water spray for extinction. 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: Follow National Fire Protection Association Guidelines or local guidelines appropriate for emergency response.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition may yield oxygen and increase the burning rate of flammable/combustible materials. Observe all appropriate precautions for handling hazardous materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives. Decomposition may release oxygen which can intensify fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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 associated risks.

If the location is not hazardous and only a small amount of material is released, dilute with water and absorb liquid with noncombustible material while wearing the protective equipment as noted below. Clean the area with detergent and water. If potentially combustible materials (e.g. paper towels, sponges, mops) are used, rinse thoroughly prior to disposal or storage. 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. Refer to Section 8 for additional information.

Notes for those trained to participate in an emergency:

ACCIDENTAL RELEASE MEASURES: Dike and contain the free liquid and absorb on vermiculite or spill pillows/pads. Residual product on towels, sponges, or mops may create a combustion hazard. Thoroughly rinse potentially combustible materials prior to disposal or storage. Place spent absorbents in UN specification drums for disposal. 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. 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. Avoid contact with skin, eyes, and clothing. Employees should be advised to wear appropriate protective equipment in the manufacturing environment. See section 8 of this document for protective equipment selection. Avoid contamination with combustible organic materials (e.g. oil, sawdust, damp paper towels, etc...), metal, powder or reducing agents. All manufacturing should be performed indoors, in an enclosed environment.

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 original container in a well-ventilated place and keep cool. Keep containers closed when not in use. Do not store any tint, lightener lotion or bleach powder after it has been mixed with developer. Store separately from combustible materials. Minimize inventory. 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: Combustibles (e.g. wood, paper, oil), organics (e.g. alcohols, glycerols, etc...), metals (e.g. iron, copper, metal alloys) and reducing agents. 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 ³	ppm	mg/m ³
Hydrogen Peroxide (7722-84-1)	OSHA PEL	1	1.4	--	--
	ACGIH TLV	1	1.4	--	--
	NIOSH REL	1	1.4	--	--

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 oxidizing 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): Gloves should be worn when mixing hair color components and applying mixture. 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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White liquid/cream		
ODOR:	No fragrance		
ODOR THRESHOLD:	Not Available		
pH:	>2.0 – ≤4.3		
MELTING/FREEZING POINT:	F: ~32	C: ~0	
BOILING POINT:	F: ~212	C: ~100	
FLASH POINT:	F: Not Applicable	C: Not Applicable	METHOD USED:
EVAPORATION RATE:	< 1 (Butyl acetate = 1)		
FLAMMABILITY:	Not Applicable		
FLAMMABLE LIMITS IN AIR:	Not Applicable		
VAPOR PRESSURE (mmHg):	Not Available		
VAPOR DENSITY (AIR = 1):	@ 70F: N/A	@ 21 C: N/A	

RELATIVE DENSITY (H2O = 1):	Not Available
SOLUBILITY IN WATER:	Not Available
PARTITION COEFFICIENT:	Not Available
AUTOIGNITION TEMPERATURE:	Not Available
DECOMPOSITION TEMPERATURE:	Not Available
VISCOSITY:	Not Available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Contained material may show increases in pressure upon exposure to radiant heat (sunlight) or sources of ignition.

STABILITY: Product is stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Contact with combustible materials may lead to combustion hazard. Hazardous polymerization is not expected to occur.

CONDITIONS TO AVOID: Heat and sunlight. Contamination with incompatibles.

INCOMPATIBILITY (MATERIAL TO AVOID): Combustibles (e.g. wood, paper, oil), organics (e.g. alcohols, glycerols, etc...), metals (e.g. iron, copper, metal alloys) and reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives. Decomposition may release oxygen which can intensify fires.

SECTION 11: TOXICOLOGICAL INFORMATION

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

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS:

SKIN CORROSION/IRRITATION: Over-exposure may cause skin dryness or slight irritation

SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye damage

RESPIRATORY/SKIN SENSITIZATION: None expected

INGESTION: None expected

INHALATION: None expected

ROUTES OF EXPOSURE: Inhalation, eyes, skin, ingestion

SYMPTOMS: Causes serious eye damage. Over-exposure may cause skin dryness or slight irritation. Prolonged contact may lighten skin.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing dermatitis may be made worse by exposure.

ACUTE TOXICOLOGY DATA FOR COMPONENTS

Material	Route	Species	Test Results
Hydrogen Peroxide (10%)	Oral LD ₅₀	Rat	>5,000 mg/kg
Hydrogen Peroxide (70%)	Dermal LD ₅₀	Rabbit	9,200 mg/kg
Hydrogen Peroxide (35%)	Dermal LD ₅₀	Rabbit	>2,000 mg/kg
Hydrogen Peroxide (50%)	LC ₅₀ (4 hr, vapor)	Rat	170 mg/m ³

Skin Corrosion/Irritation:

Hydrogen Peroxide: Not Irritating (<35%); Irritating (35-50%); Corrosive (>50%) (Rat, OECD 405)

Serious Eye Damage/Irritation:

Hydrogen Peroxide: Irritating ($\leq 8\%$); Corrosive (>8%) (Rat, OECD 404)

Respiratory Irritation:

No Data

Skin Sensitization:

Hydrogen Peroxide: Not Sensitizing (Guinea Pig, OECD 406)

CHRONIC HEALTH HAZARDS:

REPEAT DOSE TOXICITY:

NOAEL (Hydrogen Peroxide, oral): 26 mg/kg/bw/day (100 ppm) (Mouse, 90d, OECD 408)

NOAEL (Hydrogen Peroxide, inh.): 2.9 mg/m³ air (Rat, 28d, OECD 412)

CARCINOGENICITY:

Component Name (CAS-No.)	OSHA	ACGIH	NTP	IARC
Hydrogen Peroxide (7722-84-1)	--	TLV-A3	--	IARC-3

ACGIH TLV-A3 - This reference indicates that the material is "Confirmed Animal Carcinogen with Unknown Relevance to Humans".

IARC-3 - This reference indicates that the material is "Unclassifiable as to Carcinogenicity to Humans".

MUTAGENICITY:

Hydrogen Peroxide: A variety of *in vivo* tests have produced negative results. High percentages have produced positive responses under *in vitro* test systems.

REPRODUCTIVE TOXICITY:

No Data

DEVELOPMENTAL TOXICITY/TERATOGENICITY:

No Data

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
Hydrogen Peroxide	LC ₅₀ (US EPA Method)	16.4 mg/L	Pimephales promelas	96 h

ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC ₅₀ (US EPA Method)	2.4 mg/L	Daphnia pulex	48 h

TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC ₅₀ (OECD 201)	2.5 mg/L	Chlorella vulgaris	72 h

TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC ₅₀ (OECD 209)	466 mg/L	Activated Sludge	30 min

PERSISTENCY AND DEGRADABILITY:

Hydrogen Peroxide: Readily Biodegradable – OECD 209 – >99% (30 min)

BIOACCUMULATIVE POTENTIAL:

Hydrogen Peroxide: log Kow: -1.57 (Est.) – No bioaccumulation expected

SECTION 13: DISPOSAL CONSIDERATIONS

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: Containers should be completely closed and meet applicable USDOT packaging specifications. Appropriate containers should be utilized which may include fiberboard boxes for products and plastic/lined drums for bulk liquids.

WASTE DISPOSAL METHOD: This product is ignitable (D001) RCRA hazardous wastes when intended for disposal. Physical and/or chemical deactivation 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.

SECTION 14: TRANSPORT INFORMATION

North American Ground Transportation

- **IN CONSUMER PACKAGING:** Limited Quantity/Consumer Commodity (≤ 5 L)
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Exempt – Limited Quantity Marking Only
- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Oxidizer (Division 5.1)

Transport Via Water

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 5 L)
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Exempt – Limited Quantity Marking Only
- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Oxidizer (Division 5.1)

Transport Via Air (Domestic/International)

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 0.5 L) (*Not eligible for ID 8000, Consumer Commodity*)
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Limited Quantity Marking & Oxidizer (Division 5.1)
- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 2984
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Packing Group: III
Label Statements: Oxidizer (Division 5.1)

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

SECTION 15: REGULATORY INFORMATION

National Fire Protection Association Codes: Health: 2 Fire: 0 Reactivity: 1 Other: OX

Workplace Hazardous Materials Identification System: Class C; Oxidizing Material ; Class E; Corrosive Material

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

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: This document replaces the version dated May 27, 2015 and all previous versions of safety data sheets related to this product.

Author: Ronald Weslosky (Corporate Regulatory Services)

1. Identification

Product identifier L'ORÉAL PARIS FERIA BONDING AFTER COLOR CONDITIONER
Other means of identification
SDS number 00-12-0001304
Recommended use Personal care product used for cosmetic effect.
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information

US Address: L'Oreal USA Products, Inc
 133 Terminal Avenue
 Clark, NJ 07066
 USA

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

Emergency Phone # : 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 # : 412-390-3326

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Skin corrosion/irritation Category 2
 Serious eye damage/eye irritation Category 2
 Specific target organ toxicity, repeated exposure Category 2
OSHA defined hazards Not classified.

Label elements



Signal word Warning
Hazard statement Causes skin irritation. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure.
Precautionary statement
Prevention Do not breathe mist/vapors. Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.
Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage Store away from incompatible materials.

Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
GLYCERIN		56-81-5	5
BEHENTRIMONIUM CHLORIDE		68607-24-9	3.56
BIS-CETEARYL AMODIMETHICONE		1126942-72-0	1.8
CITRIC ACID		77-92-9	1.2
ISOPROPYL ALCOHOL		67-63-0	1.11
DICETYLDIMONIUM CHLORIDE		68391-05-9	1.05

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions**7. Handling and storage****Precautions for safe handling**

Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
GLYCERIN (CAS 56-81-5)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
ISOPROPYL ALCOHOL (CAS 67-63-0)	PEL	980 mg/m ³	
		400 ppm	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
GLYCERIN (CAS 56-81-5)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value
ISOPROPYL ALCOHOL (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
ISOPROPYL ALCOHOL (CAS 67-63-0)	STEL	1225 mg/m ³
		500 ppm
	TWA	980 mg/m ³ 400 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
ISOPROPYL ALCOHOL (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.
Skin protection	
Hand protection	Applicable for industrial settings only. Wear appropriate chemical resistant gloves.
Other	Applicable for industrial settings only. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Cream.
Color	White.
Odor	Characteristic.
Odor threshold	Not available.
pH	3 - 4
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	> 199.4 °F (> 93.0 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.

Solubility(ies)

Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density	$\geq 0.98 \text{ g/cm}^3$
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
L'ORÉAL PARIS FERIA BONDING AFTER COLOR CONDITIONER		
<u>Acute</u>		
Dermal		
ATEmix		219800 mg/kg
Oral		
ATEmix		36390 mg/kg
Components	Species	Test Results
BEHENTRIMONIUM CHLORIDE (CAS 68607-24-9)		
<u>Acute</u>		
Oral		
LD50	Rat	3190 mg/kg OECD 401
BIS-CETEARYL AMODIMETHICONE (CAS 1126942-72-0)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg OECD 402
Oral		
LD50	Rat	> 2000 mg/kg OECD 423
CITRIC ACID (CAS 77-92-9)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg bw OECD 402
Oral		
LD50	Mouse	5400 mg/kg bw OECD 401
DICETYLDIMONIUM CHLORIDE (CAS 68391-05-9)		
<u>Acute</u>		
Oral		
LD50	Rat	960 mg/kg

Components	Species	Test Results
GLYCERIN (CAS 56-81-5)		
Acute		
Dermal		
LD50	Rabbit	> 18700 mg/kg bw
Inhalation		
LC50	Rat	> 570 mg/L air, 1 h
Oral		
LD50	Rat	27200 mg/kg bw
ISOPROPYL ALCOHOL (CAS 67-63-0)		
Acute		
Dermal		
LD50	Rabbit	12870 mg/kg 16.4 ml/kg bw OECD 402
Inhalation		
LC50	-	51.05 mg/l, 8 Hours
<i>Vapor</i>		
LC50	Rat	> 10000 ppm, 6 Hours OECD 403
Oral		
LD50	Rat	5840 mg/kg OECD 401
Skin corrosion/irritation	Causes skin irritation.	
Irritation Corrosion - Skin		
DICETYLDIMONIUM CHLORIDE		OECD 404 Result: Corrosive Species: Rabbit
BIS-CETEARYL AMODIMETHICONE		OECD 404 Result: Irritating Species: Rabbit
CITRIC ACID		OECD 404 Result: Slightly Irritating Species: Rabbit
BEHENTRIMONIUM CHLORIDE		OECD 405 Result: Irritating Species: Rabbit
GLYCERIN		Result: Not Irritating Species: Rabbit
ISOPROPYL ALCOHOL		Result: Not Irritating Species: Rabbit
Serious eye damage/eye irritation	Causes serious eye irritation.	
Irritation Corrosion - Eye		
BEHENTRIMONIUM CHLORIDE		OECD 404 Result: Corrosive Species: Rabbit
DICETYLDIMONIUM CHLORIDE		OECD 405 Result: Corrosive Species: Rabbit
BIS-CETEARYL AMODIMETHICONE		OECD 405 Result: Irritating Species: Rabbit
CITRIC ACID		OECD 405 Result: Irritating Species: Rabbit
ISOPROPYL ALCOHOL		OECD 405 Result: Severely Irritating Species: Rabbit
GLYCERIN		Result: Not Irritating Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Skin sensitization

GLYCERIN	167 mg/m3 air OECD 413, Inhalation Result: NOAEL Species: Rat Test Duration: 90 d
BEHENTRIMONIUM CHLORIDE	OECD 406 Result: Not Sensitizing Species: Guinea pig
BIS-CETEARYL AMODIMETHICONE	OECD 406 Result: Not Sensitizing Species: Guinea pig
DICETYLDIMONIUM CHLORIDE	OECD 406 Result: Not Sensitizing Species: Guinea pig
ISOPROPYL ALCOHOL	OECD 406 Result: Not Sensitizing Species: Guinea pig
CITRIC ACID	OECD 406 Result: Not Sensitizing Species: Guinea pig
GLYCERIN	OECD 406 Result: Not Sensitizing Species: Guinea pig

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Mutagenicity

CITRIC ACID	Result: In vitro and in vivo tests did not show mutagenic effects.
GLYCERIN	Result: In vitro and in vivo tests did not show mutagenic effects.
ISOPROPYL ALCOHOL	Result: In vitro and in vivo tests did not show mutagenic effects.
BEHENTRIMONIUM CHLORIDE	Result: In vitro tests did not show mutagenic effects
DICETYLDIMONIUM CHLORIDE	Result: In vitro tests did not show mutagenic effects

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Developmental effects

CITRIC ACID	> 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat
DICETYLDIMONIUM CHLORIDE	12 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
GLYCERIN	1310 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat
ISOPROPYL ALCOHOL	400 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rabbit

Reproductivity

ISOPROPYL ALCOHOL	1000 mg/kg bw/d OECD 416, No effects on fertility Result: NOAEL Species: Rat
GLYCERIN	2000 mg/kg bw/d, No effects on fertility Result: NOAEL Species: Rat

Reproductivity
CITRIC ACID

2500 mg/kg bw/d, No effects on fertility
Result: NOAEL
Species: Rat

56.3 mg/kg bw/d OECD 416
Result: NOAEL
Species: Rat

75 mg/kg bw/d OECD 421
Result: NOAEL
Species: Rat

DICETYLDIMONIUM CHLORIDE

BEHENTRIMONIUM CHLORIDE

Specific target organ toxicity - single exposure Not classified.**Specific target organ toxicity - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

BEHENTRIMONIUM CHLORIDE

10 mg/kg bw/d OECD 407, Oral
Result: NOAEL
Species: Rat
Test Duration: 28 d

CITRIC ACID

4000 mg/kg bw/d, Oral
Result: NOAEL
Species: Rat
Test Duration: 10 d

DICETYLDIMONIUM CHLORIDE

42 - 49 mg/kg bw/d OECD 408, Oral
Result: NOAEL
Species: Rat
Test Duration: 93 d

ISOPROPYL ALCOHOL

5000 ppm OECD 413, Inhalation
Result: NOAEL
Species: Rat
Test Duration: 90 d

GLYCERIN

8000 mg/kg bw/d, Oral
Result: NOAEL
Species: Rat
Test Duration: 2 yr

Aspiration hazard Not an aspiration hazard.**Chronic effects** May cause damage to organs through prolonged or repeated exposure.**Further information** The reference to any animal testing for individual constituents mentioned in this document is based on public, third-party data.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
BEHENTRIMONIUM CHLORIDE (CAS 68607-24-9)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	3.48 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	1.39 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	0.5 - 1 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	43 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.128 mg/l, 21 d OECD 211
Fish	NOEC	Danio rerio	0.24 mg/l, 9 d OECD 212
CITRIC ACID (CAS 77-92-9)			
Aquatic			
Algae	EC50	Microcystis aeruginosa	80 mg/l, 7 d
Crustacea	LC50	Daphnia magna	1535 mg/l, 24 h
Fish	LC50	Leuciscus idus	440 - 760 mg/l, 96 h OECD 203

Components		Species	Test Results
Other	EC50	Pseudomonas putida	4235 mg/l, 18 h OECD 209
DICETYLDIMONIUM CHLORIDE (CAS 68391-05-9)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	0.386 mg/l, 72 h OECD 201
Crustacea	EC50	Acartia tonsa	0.295 mg/l, 48 h ISO 14669
Fish	LC50	Danio rerio	0.26 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	68 mg/l, 3 h OECD 209
<i>Chronic</i>			
Algae	NOEC	Pseudokirchneriella subcapitata	0.06 mg/l, 72 h OECD 201
Crustacea	NOEC	Daphnia magna	0.5 mg/l, 21 d OECD 202
Fish	NOEC	Pimephales promelas	0.23 mg/l, 35 d EPA-66013-75-00
GLYCERIN (CAS 56-81-5)			
Aquatic			
<i>Acute</i>			
Algae	EC0	Scenedesmus quadricauda	> 10000 mg/l, 192 h
Crustacea	EC50	Daphnia magna	1955 mg/l, 48 h
Fish	LC50	Oncorhynchus mykiss	54000 mg/l, 96 h
Other	NOEC	Pseudomonas putida	> 10000 mg/l, 16 h
ISOPROPYL ALCOHOL (CAS 67-63-0)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Scenedesmus quadricauda	> 1000 mg/l, 72 h
Crustacea	EC50	Daphnia magna	9714 mg/l, 24 h OECD 202
Fish	LC50	Pimephales promelas	9640 mg/l, 96 h OECD 203
Other	TD	Pseudomonas putida	1050 mg/l, 16 DIN 38412, Pt. 8

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

BEHENTRIMONIUM CHLORIDE	80 % OECD 301 Result: Readily Biodegradable Test Duration: 28 d
CITRIC ACID	97 % OECD 301 B Test Duration: 28 d
DICETYLDIMONIUM CHLORIDE	61 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
GLYCERIN	OECD 301 Result: Readily Biodegradable
ISOPROPYL ALCOHOL	95 % OECD 301 E Result: Readily Biodegradable Test Duration: 21 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

CITRIC ACID	-1.64
DICETYLDIMONIUM CHLORIDE	4.7 - 4.9 OECD 123
GLYCERIN	-1.76
ISOPROPYL ALCOHOL	0.05

Bioaccumulation

ISOPROPYL ALCOHOL	Result: Bioaccumulation is unlikely.
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Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

IATA

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

IMDG

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ISOPROPYL ALCOHOL (CAS 67-63-0) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No (Exempt)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ISOPROPYL ALCOHOL	67-63-0	1.11

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

GLYCERIN (CAS 56-81-5)

Other Flavoring Substances with OSHA PEL's

ISOPROPYL ALCOHOL (CAS 67-63-0)

Low priority

16. Other information, including date of preparation or last revision

Issue date 09-12-2022

Version # 01

NFPA ratings Health: 2
Flammability: 1
Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

1. Identification

Product identifier GARNIER NUTRISSE ULTRA COLOR FRUIT OIL CONCENTRATE

Other means of identification

SDS number 00-22-0000130

Recommended use Personal care product used for cosmetic effect.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

US Address: L'Oreal USA Products, Inc
133 Terminal Avenue
Clark, NJ 07066
USA

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

Emergency Phone # : 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 # : 412-390-3326

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Aspiration hazard Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) Combustible.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
MINERAL OIL		8042-47-5	47.5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemicals. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat and sources of ignition. Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
MINERAL OIL (CAS 8042-47-5)	PEL	5 mg/m ³	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
MINERAL OIL (CAS 8042-47-5)	TWA	5 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Color Not available.

Odor Characteristic.

Odor threshold Not available.

pH 6.7 - 7.3

Melting point/freezing point Not available.

Initial boiling point and boiling range > 212 °F (> 100 °C)

Flash point > 212.0 °F (> 100.0 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Specific gravity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	No adverse effects due to eye contact are expected.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Components	Species	Test Results
MINERAL OIL (CAS 8042-47-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg OECD 402
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 5 mg/L air, 4 h OECD 403
Oral		
LD50	Rat	> 5000 mg/kg OECD 401

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation No adverse effects due to skin contact are expected.

Irritation Corrosion - Skin

MINERAL OIL

OECD 404
Result: Not Irritating
Species: Rabbit

Serious eye damage/eye irritation No adverse effects due to eye contact are expected.

Irritation Corrosion - Eye
MINERAL OIL

OECD 405
Result: Not Irritating
Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Skin sensitization
MINERAL OIL

OECD 406
Result: Not Sensitizing
Species: Guinea pig

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Mutagenicity
MINERAL OIL

Result: In vitro tests did not show mutagenic effects

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

MINERAL OIL (CAS 8042-47-5) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Developmental effects
MINERAL OIL

> 5000 mg/kg bw/d OECD 414, No effects on development
Result: NOAEL
Species: Rat

Reproductivity
MINERAL OIL

>= 2000 mg/kg bw/d OECD 415, No effects on fertility
Result: NOAEL
Species: Rat

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

MINERAL OIL

> 2000 mg/kg bw/d OECD 411, Dermal
Result: NOAEL
Species: Rat
Test Duration: 90 d
> 50 mg/m³ air OECD 412, Inhalation
Result: NOAEC
Species: Rat
Test Duration: 28 d
>= 1200 mg/kg bw/d OECD 453, Oral
Result: NOAEL
Species: Rat
Test Duration: 2 years

Aspiration hazard May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
MINERAL OIL (CAS 8042-47-5)		
Aquatic		
<i>Acute</i>		
Algae	NOEL Pseudokirchneriella subcapitata	> 100 mg/l, 72 h OECD 201
Crustacea	EL50 Daphnia magna	> 100 mg/l, 48 h OECD 202
Fish	LL50 Oncorhynchus mykiss	> 100 mg/l, 96 h OECD 203

Components	Species	Test Results
<i>Chronic</i> Crustacea	NOEC Daphnia magna	10 mg/l, 21 d OECD 211

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

MINERAL OIL

31 % OECD 301 F

Result: Not Readily Biodegradable

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

Not regulated.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

IATA

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

IMDG

FINISHED GOODS

Not regulated as dangerous goods.

BULK

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

16. Other information, including date of preparation or last revision

Issue date 04-30-2019

Version # 01

NFPA ratings Health: 2
 Flammability: 1
 Instability: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

1. Identification

Product identifier L'ORÉAL PARIS FERIA MULTI-FACETED SHIMMERING COLOUR - GROUP 1

Other means of identification

SDS number 38-21-0000056

Recommended use Personal care product used for cosmetic effect.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

US Address: L'Oreal USA Products, Inc
133 Terminal Avenue
Clark, NJ 07066
USA

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

Emergency Phone # : 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 # : 412-390-3326

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3

Health hazards Skin corrosion/irritation Category 1

Serious eye damage/eye irritation Category 1

Sensitization, skin Category 1A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ETHANOL		64-17-5	8.19
PEG-4 RAPESEEDAMIDE		85536-23-8	8.13
GLYCERYL LAURYL ETHER		9022-75-7	7
DECETH-3		66455-15-0	6.93
AMMONIUM HYDROXIDE		1336-21-6	< 7
ETHANOLAMINE		141-43-5	< 6
LAURETH-5 CARBOXYLIC ACID		27306-90-7	4.5
HEXYLENE GLYCOL		107-41-5	3
P-PHENYLENEDIAMINE		106-50-3	< 2
4-AMINO-2-HYDROXYTOLUENE		2835-95-2	< 2
OLEYL ALCOHOL		68002-94-8	1.1
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE		155601-30-2	< 2
2,4-DIAMINOPHENOXYETHANOL HCL		66422-95-5	< 2
N,N-BIS(2-HYDROXYETHYL)-p-PH ENYLENEDIAMINE SULFATE		54381-16-7	≤ 2
P-AMINOPHENOL		123-30-8	< 0.8
RESORCINOL		108-46-3	< 0.8
1-NAPHTHOL		90-15-3	< 0.8
M-AMINOPHENOL		591-27-5	< 0.7
TOLUENE-2,5-DIAMINE		95-70-5	< 0.6
6-HYDROXYINDOLE		2380-86-1	≤ 0.1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m ³
		50 ppm
ETHANOL (CAS 64-17-5)	PEL	1900 mg/m ³
		1000 ppm
ETHANOLAMINE (CAS 141-43-5)	PEL	6 mg/m ³
		3 ppm
P-PHENYLENEDIAMINE (CAS 106-50-3)	PEL	0.1 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
ETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm	
	TWA	3 ppm	
HEXYLENE GLYCOL (CAS 107-41-5)	STEL	10 mg/m ³	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction
P-PHENYLENEDIAMINE (CAS 106-50-3)	TWA	0.1 mg/m ³	
RESORCINOL (CAS 108-46-3)	STEL	20 ppm	
	TWA	10 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m ³
		35 ppm
	TWA	18 mg/m ³
ETHANOL (CAS 64-17-5)		25 ppm
	TWA	1900 mg/m ³
		1000 ppm
ETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m ³
		6 ppm
	TWA	8 mg/m ³
HEXYLENE GLYCOL (CAS 107-41-5)		3 ppm
	Ceiling	125 mg/m ³
		25 ppm
P-PHENYLENEDIAMINE (CAS 106-50-3)	TWA	0.1 mg/m ³
RESORCINOL (CAS 108-46-3)	STEL	90 mg/m ³
		20 ppm
	TWA	45 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
		10 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
TOLUENE-2,5-DIAMINE (CAS 95-70-5)	TWA	0.025 mg/m ³
		0.005 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines**US - California OELs: Skin designation**

P-PHENYLENEDIAMINE (CAS 106-50-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

P-PHENYLENEDIAMINE (CAS 106-50-3) Skin designation applies.

US - Tennessee OELs: Skin designation

P-PHENYLENEDIAMINE (CAS 106-50-3) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

P-PHENYLENEDIAMINE (CAS 106-50-3) Can be absorbed through the skin.

US WEEL Guides: Skin designation

TOLUENE-2,5-DIAMINE (CAS 95-70-5) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

P-PHENYLENEDIAMINE (CAS 106-50-3) Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Applicable for industrial settings only. Wear appropriate chemical resistant gloves.

Other Applicable for industrial settings only. Wear appropriate chemical resistant clothing.

Respiratory protection Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties**Appearance**

Physical state Liquid.

Color Not available.

Odor Characteristic.

Odor threshold Not available.

pH 10.5

Melting point/freezing point Not available.

Initial boiling point and boiling range > 212 °F (> 100 °C)

Flash point 105.8 °F (41.0 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Fire point > 212.00 °F (> 100.00 °C) ISO 2592

Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong acids. Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns. May cause an allergic skin reaction.

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
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L'ORÉAL PARIS FERIA MULTI-FACETED SHIMMERING COLOUR - GROUP 1

Acute

Dermal

ATEmix

13610 mg/kg

Product	Species	Test Results
Oral ATEmix		2233 mg/kg
Components	Species	Test Results
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE (CAS 155601-30-2)		
Acute		
Inhalation		
<i>Aerosol</i>		
LD50	Rat	> 5.24 mg/m ³ , 4 h OECD 403
Oral		
LD50	Rat	> 2000 mg/kg OECD 401
1-NAPHTHOL (CAS 90-15-3)		
Acute		
Dermal		
LD50	Rabbit	>= 880 mg/kg
Inhalation		
<i>Aerosol</i>		
LD50	Rat	> 420 mg/m ³ , 1 Hours
Oral		
LD50	Rat	1000 - 2000 mg/kg
2,4-DIAMINOPHENOXYETHANOL HCL (CAS 66422-95-5)		
Acute		
Oral		
LD50	Rat	1000 mg/kg OECD 401
4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)		
Acute		
Oral		
LD50	Rat	3600 mg/kg
6-HYDROXYINDOLE (CAS 2380-86-1)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg OECD 402
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 2000 mg/m ³ , 4 h OECD 403
Oral		
LD50	Rat	600 - 1200 mg/kg
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
Acute		
Inhalation		
LC50	Rat	11590 mg/l, 1 h
Oral		
LD50	Rat	350 mg/kg bw OECD 401
DECETH-3 (CAS 66455-15-0)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg Based on test data for structurally similar materials.
Oral		
LD50	Rat	> 2000 mg/kg Based on test data for structurally similar materials.

Components	Species	Test Results
ETHANOL (CAS 64-17-5)		
Acute		
Dermal		
LD50	Rabbit	> 20000 mg/kg
Inhalation		
<i>Vapor</i>		
LC50	Rat	124.7 mg/l, 4 h OECD 403
Oral		
LD50	Rat	10470 mg/kg OECD 401
ETHANOLAMINE (CAS 141-43-5)		
Acute		
Dermal		
LD50	Rabbit	2504 mg/kg OECD 402
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 1.3 mg/l, 6 h
Oral		
LD50	Rat	1515 mg/kg OECD 401
GLYCERYL LAURYL ETHER (CAS 9022-75-7)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/l OECD 402
Oral		
LD50	Rat	> 2000 mg/l OECD 423
HEXYLENE GLYCOL (CAS 107-41-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg OECD 402
Inhalation		
LC50	Rat	> 60 ml/m3 air, 8 h OECD 403
Oral		
LD50	Rat	> 2000 mg/kg OECD 420
LAURETH-5 CARBOXYLIC ACID (CAS 27306-90-7)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg OECD 401
M-AMINOPHENOL (CAS 591-27-5)		
Acute		
Inhalation		
LC50	Rat	1162 mg/m3
Oral		
LD50	Rat	924 mg/kg
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE (CAS 54381-16-7)		
Acute		
Oral		
LD50	Rat	264 mg/kg
OLEYL ALCOHOL (CAS 68002-94-8)		
Acute		
Dermal		
LD50	Rabbit	8000 mg/kg Based on test data for structurally similar materials.

Components	Species	Test Results
Oral LD50	Rat	> 2000 mg/kg OECD 401
P-AMINOPHENOL (CAS 123-30-8)		
Acute		
Dermal LD50	Rabbit	> 8000 mg/kg EPA OPTTS 870.1200
Inhalation		
<i>Dust</i>		
LC50	Rat	> 3.42 mg/l, 4 h OECD 403
Oral LD50	Rat	671 mg/kg EPA OPPTS 870.1100
PEG-4 RAPESEEDAMIDE (CAS 85536-23-8)		
Acute		
Dermal LD50	Rat	> 2000 mg/kg OECD 402
Inhalation		
LC50	Rat	6 mg/L air, 4 h OECD 436
Oral LD50	Rat	> 2000 mg/kg OECD 401
P-PHENYLENEDIAMINE (CAS 106-50-3)		
Acute		
Dermal LD50	Rabbit	> 7940 mg/kg
Inhalation		
<i>Vapor or aerosol</i>		
LC50	Rat	0.92 mg/l, 4 Hours
Oral LD50	Rat	80 - 100 mg/kg bw
RESORCINOL (CAS 108-46-3)		
Acute		
Dermal LD50	Rabbit	2830 mg/kg FHSL Act
Inhalation		
<i>Aerosol</i>		
LC0	Rat	> 7800 mg/m ³ , 1 h FHSL Act
Oral LD50	Rat	510 mg/kg OECD 401
TOLUENE-2,5-DIAMINE (CAS 95-70-5)		
Oral LD50	Rat	102 mg/kg OECD 401
Acute		
Dermal LD50	Rabbit	3520 mg/kg
Inhalation		
<i>Dust</i>		
LC50	Rat	0.99 mg/l, 4 h
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Irritation Corrosion - Skin RESORCINOL	FHLS Act, (100%) Result: Irritating Species: Rabbit	

Irritation Corrosion - Skin

ETHANOLAMINE	OECD 404 Result: Corrosive Species: Rabbit
GLYCERYL LAURYL ETHER	OECD 404 Result: Corrosive Species: Rabbit
AMMONIUM HYDROXIDE	OECD 404 Result: Corrosive Species: Rat
PEG-4 RAPESEEDAMIDE	OECD 404 Result: Irritating Species: Rabbit
2,4-DIAMINOPHENOXYETHANOL HCL	OECD 404 Result: Not Irritating Species: Rabbit
6-HYDROXYINDOLE	OECD 404 Result: Not Irritating Species: Rabbit
ETHANOL	OECD 404 Result: Not Irritating Species: Rabbit
M-AMINOPHENOL	OECD 404 Result: Not Irritating Species: Rabbit
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	OECD 404 Result: Slightly Irritating Species: Rabbit
LAURETH-5 CARBOXYLIC ACID	OECD 404 Result: Slightly Irritating Species: Rabbit
RESORCINOL	OECD 404, (2.5%) Result: Not Irritating Species: Rabbit
DECETH-3	OECD 404, Based on test data for structurally similar materials. Result: Slightly Irritating Species: Rabbit
HEXYLENE GLYCOL	OECD 405 Result: Slightly irritating Species: Rabbit
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMI NE SULFATE	OECD 439 Result: Not Irritating Species: In vitro
TOLUENE-2,5-DIAMINE	OECD 439 Result: Not Irritating Species: In vitro
4-AMINO-2-HYDROXYTOLUENE	OECD 439 Result: Not Irritating Species: RhE
1-NAPHTHOL	Result: Irritating Species: Rabbit
P-PHENYLENEDIAMINE	Result: Not Irritating Species: Guinea pig
OLEYL ALCOHOL	Result: Slightly Irritating Species: Rabbit
P-AMINOPHENOL	Result: Slightly Irritating Species: Rabbit

Serious eye damage/eye irritation Causes serious eye damage.

Irritation Corrosion - Eye

P-AMINOPHENOL	EPA OPPTS 870.2400 Result: Slightly Irritating Species: Rabbit
RESORCINOL	FHLS Act, (100%) Result: Corrosive Species: Rabbit

Irritation Corrosion - Eye

1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	OECD 405 Result: Corrosive Species: Rabbit
6-HYDROXYINDOLE	OECD 405 Result: Corrosive Species: Rabbit
ETHANOLAMINE	OECD 405 Result: Corrosive Species: Rabbit
LAURETH-5 CARBOXYLIC ACID	OECD 405 Result: Corrosive Species: Rabbit
TOLUENE-2,5-DIAMINE	OECD 405 Result: Corrosive Species: Rabbit
2,4-DIAMINOPHENOXYETHANOL HCL	OECD 405 Result: Irritating Species: Rabbit
ETHANOL	OECD 405 Result: Irritating Species: Rabbit
P-PHENYLENEDIAMINE	OECD 405 Result: Irritating Species: Rabbit
M-AMINOPHENOL	OECD 405 Result: Not Irritating Species: Rabbit
HEXYLENE GLYCOL	OECD 405 Result: Slightly irritating Species: Rabbit
PEG-4 RAPESEEDAMIDE	OECD 405 Result: Slightly Irritating Species: Rabbit
RESORCINOL	OECD 405, (2.5%) Result: Not Irritating Species: Rabbit
1-NAPHTHOL	OECD 438 Result: Corrosive Species: In vitro
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	OECD 438 Result: Irritating Species: In vitro
4-AMINO-2-HYDROXYTOLUENE	OECD 492 Result: Not Irritating Species: RhCE
AMMONIUM HYDROXIDE	Result: Corrosive
GLYCERYL LAURYL ETHER	Result: Corrosive
DECETH-3	Result: Corrosive Species: Rabbit
HEXYLENE GLYCOL	Result: Irritating Species: Human
OLEYL ALCOHOL	Result: Not Irritating Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization Due to partial or complete lack of data the classification is not possible.

Skin sensitization May cause an allergic skin reaction.

Skin sensitization

1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	EU Method B.6 - Cat 1 Result: Sensitizing Species: Guinea pig
ETHANOL	OECD 406 Result: Not Sensitizing Species: Guinea pig
GLYCERYL LAURYL ETHER	OECD 406 Result: Not Sensitizing Species: Guinea pig

Skin sensitization

HEXYLENE GLYCOL	OECD 406 Result: Not Sensitizing Species: Guinea pig
LAURETH-5 CARBOXYLIC ACID	OECD 406 Result: Not Sensitizing Species: Guinea pig
PEG-4 RAPESEEDAMIDE	OECD 406 Result: Not Sensitizing Species: Guinea pig
P-AMINOPHENOL	OECD 406 Result: Sensitizing Species: Guinea pig
DECETH-3	OECD 406, Based on test data for structurally similar materials. Result: Not Sensitizing Species: Guinea pig
1-NAPHTHOL	OECD 429 Result: Sensitizing Species: Mouse
2,4-DIAMINOPHENOXYETHANOL HCL	OECD 429 Result: Sensitizing Species: Mouse
4-AMINO-2-HYDROXYTOLUENE	OECD 429 Result: Sensitizing Species: Mouse
6-HYDROXYINDOLE	OECD 429 Result: Sensitizing Species: Mouse
M-AMINOPHENOL	OECD 429 Result: Sensitizing Species: Mouse
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	OECD 429 Result: Sensitizing Species: Mouse
P-PHENYLENEDIAMINE	OECD 429 Result: Sensitizing Species: Mouse
RESORCINOL	OECD 429 Result: Sensitizing Species: Mouse
TOLUENE-2,5-DIAMINE	OECD 429 Result: Sensitizing Species: Mouse
ETHANOLAMINE	Result: Not Sensitizing Species: Guinea pig
OLEYL ALCOHOL	Result: Not Sensitizing Species: Rabbit
AMMONIUM HYDROXIDE	Result: Not Sensitizing Species: Guinea pig

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Mutagenicity

ETHANOL	Result: In vitro and in vivo tests did not show mutagenic effects.
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	Result: In vitro and in vivo tests did not show mutagenic effects.
OLEYL ALCOHOL	Result: In vitro and in vivo tests did not show mutagenic effects.
PEG-4 RAPESEEDAMIDE	Result: In vitro and in vivo tests did not show mutagenic effects.
ETHANOLAMINE	Result: In vitro and in vivo tests did show mutagenic effects
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	Result: In vitro tests did not show mutagenic effects
AMMONIUM HYDROXIDE	Result: In vitro tests did not show mutagenic effects
DECETH-3	Result: In vitro tests did not show mutagenic effects
GLYCERYL LAURYL ETHER	Result: In vitro tests did not show mutagenic effects
HEXYLENE GLYCOL	Result: In vitro tests did not show mutagenic effects

Mutagenicity

LAURETH-5 CARBOXYLIC ACID
2,4-DIAMINOPHENOXYETHANOL HCL

Result: In vitro tests did not show mutagenic effects
Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

M-AMINOPHENOL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

P-PHENYLENEDIAMINE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

RESORCINOL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

TOLUENE-2,5-DIAMINE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

4-AMINO-2-HYDROXYTOLUENE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo tests.

6-HYDROXYINDOLE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo tests.

1-NAPHTHOL

Result: In vitro tests showed varied results. In vivo tests showed negative results.

P-AMINOPHENOL

Result: In vivo tests showed mutagenic effects

Carcinogenicity

Not classifiable as to carcinogenicity to humans. Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

P-PHENYLENEDIAMINE (CAS 106-50-3)

3 Not classifiable as to carcinogenicity to humans.

RESORCINOL (CAS 108-46-3)

3 Not classifiable as to carcinogenicity to humans.

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

Possible reproductive hazard.

Developmental effects

ETHANOL

> 20000 ppm OECD 414, No effects on development

Result: NOAEL

Species: Rat

ETHANOLAMINE

>= 450 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

>= 50 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

P-PHENYLENEDIAMINE

10 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

M-AMINOPHENOL

100 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

P-AMINOPHENOL

100 mg/kg bw/d OECD 421

Result: NOAEL

Species: Rat

4-AMINO-2-HYDROXYTOLUENE

180 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

2,4-DIAMINOPHENOXYETHANOL HCL

20 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

OLEYL ALCOHOL

2000 mg/kg bw/d OECD 422

Result: NOAEL

Species: Rat

RESORCINOL

250 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

HEXYLENE GLYCOL

300 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

Developmental effects

1-NAPHTHOL	400 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
TOLUENE-2,5-DIAMINE	50 mg/kg bw/d OECD 414, Based on test data for structurally similar materials. Result: NOAEL Species: Rat
6-HYDROXYINDOLE	50 mg/kg bw/d Result: NOAEL Species: Rat
PEG-4 RAPESEEDAMIDE	500 mg/kg bw/d OECD 421, No effects on development Result: NOEL Species: Rat
GLYCERYL LAURYL ETHER	600 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat

Reproductivity

TOLUENE-2,5-DIAMINE	>= 45 mg/kg bw/d OECD 416, Based on test data for structurally similar materials. Result: NOAEL Species: Rat
P-AMINOPHENOL	100 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
HEXYLENE GLYCOL	1000 mg/kg bw/d OECD 421 Result: NOEL Species: Rat
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
4-AMINO-2-HYDROXYTOLUENE	200 mg/kg bw/d OECD 415 Result: NOAEL Species: Rat
OLEYL ALCOHOL	2000 mg/kg bw/d OECD 422 Result: NOAEL Species: Rat
ETHANOL	20700 mg/kg bw/d OECD 416, No effects on fertility Result: NOAEL Species: Rat
RESORCINOL	245 mg/kg bw/d OECD 416 Result: NOAEL Species: Rat
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	300 mg/kg bw/d OECD 415 Species: Rat
ETHANOLAMINE	300 mg/kg bw/d OECD 416 Result: NOAEL Species: Rat
PEG-4 RAPESEEDAMIDE	500 mg/kg bw/d OECD 421, No effects on fertility Result: NOEL Species: Rat
GLYCERYL LAURYL ETHER	600 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
1-NAPHTHOL	Result: No Data

Specific target organ toxicity - single exposure May cause respiratory irritation.

AMMONIUM HYDROXIDE	Result: Highly Irritating
1-NAPHTHOL	Result: Irritating

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

P-AMINOPHENOL	10 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
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**Specific target organ toxicity -
repeated exposure**

TOLUENE-2,5-DIAMINE	10 mg/kg bw/d OECD 408, Oral Result: NOEL Species: Rat Test Duration: 90 d
DECETH-3	100 mg/kg bw/d OECD 407, Based on test data for structurally similar materials. Result: NOAEL Species: Rat Test Duration: 28 d
6-HYDROXYINDOLE	100 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
1-NAPHTHOL	130 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
GLYCERYL LAURYL ETHER	150 mg/kg bw/d OECD 407 Result: NOAEL Species: Rat Test Duration: 28 d
PEG-4 RAPESEEDAMIDE	150 mg/kg bw/d OECD 407, Oral Result: NOAEL Species: Rat Test Duration: 28 d
ETHANOLAMINE	150 mg/m ³ air OECD 412, Inhalation Result: NOAEC Species: Rat Test Duration: 28 d
P-PHENYLENEDIAMINE	16 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
ETHANOL	1730 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
4-AMINO-2-HYDROXYTOLUENE	180 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
2,4-DIAMINOPHENOXYETHANOL HCL	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
M-AMINOPHENOL	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	250 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
ETHANOLAMINE	300 mg/kg bw/d OECD 416, Oral Result: NOAEL Species: Rat Test Duration: 90 d
HEXYLENE GLYCOL	450 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
RESORCINOL	80 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d

Specific target organ toxicity - repeated exposure
RESORCINOL

991 mg/m³
Result: NOAEC
Species: Rat
Test Duration: 14 d

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Chronic effects May be harmful if absorbed through skin.

Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Further information May cause allergic respiratory and skin reactions. The reference to any animal testing for individual constituents mentioned in this document is based on public, third-party data.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE (CAS 155601-30-2)			
Aquatic			
<i>Acute</i>			
Algae		Pseudokirchneriella subcapitata	5.33 mg/l, 72 h EU C.3
Crustacea	EC50	Daphnia magna	11.12 mg/l, 48 h TG 202
Fish	LC50	Danio rerio	86.2 mg/l, 96 h EU C.1
1-NAPHTHOL (CAS 90-15-3)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 2.18 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	2.51 mg/l, 48 h
Fish	LC50	Pimephales promelas	4.24 mg/l, 96 h
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.25 mg/l, 21 d OECD 211
2,4-DIAMINOPHENOXYETHANOL HCL (CAS 66422-95-5)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	36.5 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	7.4 mg/l, 48 h OECD 202
4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	41 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	2.3 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	25 mg/l, 96 h OECD 236
Other	EC50	Activated sludge of a predominantly domestic sewage	> 150 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.24 mg/l, 21 d OECD 211
6-HYDROXYINDOLE (CAS 2380-86-1)			
<i>Acute</i>			
Aquatic			
<i>Acute</i>			
Algae		Desmodesmus subspicatus	9.1 mg/l, 72 h

Components		Species	Test Results
Crustacea	EC50	Daphnia magna	1.74 mg/l, 48 h
Fish	LC50	Danio rerio	21.7 mg/l, 96 h
Other	IC50	Activated sludge of a predominantly domestic sewage	> 0.9 mg/l, 3 d
AMMONIUM HYDROXIDE (CAS 1336-21-6)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Chlorella vulgaris	2700 mg/l, 18 d
Crustacea	EC50	Daphnia magna	101 mg/l, 48 h ASTM E729-80
Fish	LC50	Oncorhynchus mykiss	0.89 mg/l, 96 h
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.79 mg/l, 21 d
Fish	NOEC	Oncorhynchus mykiss	1.2 mg/l, 61 d OECD 210
DECETH-3 (CAS 66455-15-0)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	1.8 mg/l, 72 h 92/69/EWG
Crustacea	EC50	Daphnia magna	0.39 mg/l, 48 h 92/69/EWG
Fish	LC50	Cyprinus carpio	1.2 mg/l, 96 h EU C.1
Other	EC0	Activated sludge of a predominantly domestic sewage	140 mg/l, 3 h 88/302/EG
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	<= 1 mg/l, 21 d
Fish	NOEC	Lepomis macrochirus	0.16 mg/l, 10 d
ETHANOL (CAS 64-17-5)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	22200 mg/l, 96 h
Crustacea	EC50	Ceriodaphnia dubia	5012 mg/l, 48 h
Fish	LC50	Pimephales promelas	15300 mg/l, 96 h
Other	IC50	Activated sludge of a predominantly domestic sewage	> 1000 mg/l, 3 h
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	9.6 mg/l, 9 d
Fish	NOEC	Danio rerio	250 mg/l, 120 h OECD 212
ETHANOLAMINE (CAS 141-43-5)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	2.8 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	65 mg/l, 48 h EU C.2
Fish	LC50	Cyprinus carpio	349 mg/l, 96 h EU C.1
Other	EC10	Activated sludge of a predominantly domestic sewage	> 1000 mg/l, 30 min OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.85 mg/l, 21 d OECD 211
Fish	NOEC	Oryzias latipes	1.24 mg/l, 41 d OECD 210

Components		Species	Test Results
GLYCERYL LAURYL ETHER (CAS 9022-75-7)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	1.11 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.875 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	1.61 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	31.6 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.036 mg/l, 21 d OECD 211
Fish	NOEC	Danio rerio	0.086 mg/l, 30 d OECD 210
HEXYLENE GLYCOL (CAS 107-41-5)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 429 mg/l, 72 hours OECD 201
Crustacea	EC50	Daphnia magna	5410 mg/l, 48 hours OECD 202
Fish	LC50	Pimephales promelas	10700 mg/l, 96 hours OECD 203
Other	NOEC	Pseudomonas aeruginosa	200 mg/l, 10 days
LAURETH-5 CARBOXYLIC ACID (CAS 27306-90-7)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Oncorhynchus mykiss	7.5 mg/l, 96 h
M-AMINOPHENOL (CAS 591-27-5)			
<i>Acute</i>			
Other	IC50	Tetrahymena pyriformis	361 mg/l, 40 h
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	62 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	1.1 mg/l, 48 h DIN 38412, Pt. 11
Fish	LC50	Danio rerio	82.64 mg/l, 96 h OECD 203
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.05 mg/l, 21 d OECD 211
Fish	NOEC	Oryzias latipes	25 mg/l, 25 d OECD 204
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE (CAS 54381-16-7)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	0.338 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.381 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	> 235 mg/l, 96 h
Other	EC50	Activated sludge of a predominantly domestic sewage	228 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.674 mg/l, 21 d OECD 211
OLEYL ALCOHOL (CAS 68002-94-8)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	250 mg/l OECD 201
Fish	LC50	Fish	> 1000 mg/l OECD 203

Components	Species		Test Results
P-AMINOPHENOL (CAS 123-30-8)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 0.253 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.182 mg/l, 48 h OECD 202
Fish	LC50	Oryzias latipes	0.82 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	29.9 mg/l, 3 h OECD 209
PEG-4 RAPESEEDAMIDE (CAS 85536-23-8)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	410 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	3.8 mg/l, 48 h OECD 202
Fish	LC50	Oncorhynchus mykiss	2.9 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	> 1000 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.39 mg/l, 21 d OECD 211
P-PHENYLENEDIAMINE (CAS 106-50-3)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	0.27 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.33 mg/l, 48 h OECD 202
Fish	LC50	Oncorhynchus mykiss	3.9 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	13.4 mg/l, 3 h OECD 209
RESORCINOL (CAS 108-46-3)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 97 mg/l, 97 h OECD 201
Crustacea	LC50	Daphnia magna	1 mg/l, 48 h OECD 202
Fish	LC50	Pimephales promelas	26.8 mg/l, 96 h EPA-660/3/75-009
Other		Activated sludge of a predominantly domestic sewage	79 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	>= 0.172 mg/l, 21 d
Fish	LOEC	Oncorhynchus mykiss	320 mg/l, 60 d
TOLUENE-2,5-DIAMINE (CAS 95-70-5)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	1.02 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.491 mg/l, 48 h OECD 202
Fish	LC50	Oryzias latipes	0.05 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	3.75 mg/l, 3 h OECD 209
<i>Chronic</i>			
Algae	NOEC	Pseudokirchneriella subcapitata	0.11 mg/l, 72 h OECD 201

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	33.3 % EU C.4-E Result: Not readily biodegradable > 77.8 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
1-NAPHTHOL	
4-AMINO-2-HYDROXYTOLUENE	0 % OECD 301 B Result: Not Readily Biodegradable Test Duration: 28 d
6-HYDROXYINDOLE DECETH-3	Result: Not Biodegradable 78 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
ETHANOL	84 % Result: Readily Biodegradable Test Duration: 20 d
ETHANOLAMINE	> 90 % OECD 301 A Result: Readily Biodegradable Test Duration: 21 d
GLYCERYL LAURYL ETHER	88 % OECD 301 B Result: Readily Biodegradable
HEXYLENE GLYCOL	81 % OECD 301 F Result: Readily biodegradable Test Duration: 28 d
LAURETH-5 CARBOXYLIC ACID	78 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	14.3 % OECD 301B Result: Not Readily Biodegradable Test Duration: 28 d
OLEYL ALCOHOL	87 % OECD 301 D Result: Not Readily Biodegradable Test Duration: 28 d
PEG-4 RAPESEEDAMIDE	96 % OECD 203 Result: Readily Biodegradable Test Duration: 28 d
P-PHENYLENEDIAMINE	28 - 30 % OECD 301 D Result: Not Readily Biodegradable Test Duration: 28 d
RESORCINOL	66.7 % OECD 301 C Result: Readily Biodegradable Test Duration: 14 d
TOLUENE-2,5-DIAMINE	17 % OECD 301 D Result: Not Readily Biodegradable Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

1-NAPHTHOL	2.836 OECD 107
4-AMINO-2-HYDROXYTOLUENE	-0.53 EU A.8 0.53 OECD 117
6-HYDROXYINDOLE	1.46 EU A.8
ETHANOL	-0.31
ETHANOLAMINE	-2.3 OECD 107
GLYCERYL LAURYL ETHER	3.79 - 4.25
M-AMINOPHENOL	0.21
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	-2.8 -2.8 OECD 107
P-AMINOPHENOL	0.25
PEG-4 RAPESEEDAMIDE	5
P-PHENYLENEDIAMINE	-0.25
RESORCINOL	0.8
TOLUENE-2,5-DIAMINE	-0.321 OECD 107
Bioconcentration factor (BCF)	
P-AMINOPHENOL	10 - 46 OECD 305 C

Bioaccumulation
1-NAPHTHOL
ETHANOLAMINE
P-AMINOPHENOL
TOLUENE-2,5-DIAMINE

Result: Bioaccumulation is unlikely
Result: Bioaccumulation is unlikely.
Result: Bioaccumulation is unlikely.
Result: Bioaccumulation is unlikely.

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

This product is ignitable (D001) RCRA hazardous wastes when intended for disposal.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

FINISHED GOODS

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE), Limited Quantity
Class 8
Packing group II
Transport hazard class(es)
Label(s) Limited Quantity
Packaging exceptions 154
LTD QTY Net Inner Capacity 1.0 L

BULK

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE), MARINE POLLUTANT (P-PHENYLENEDIAMINE, GLYCERYL LAURYL ETHER)
Class 8
Packing group II
Environmental hazards
Marine pollutant Yes
Transport hazard class(es)
Label(s) 8
Special provisions B2, IB2, T11, TP2, TP27
Packaging non bulk 202

IATA

FINISHED GOODS

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE)
Class 8
Packing group II
Transport hazard class(es)
Label(s) Class 8, Limited Quantity
ERG Number 8L
LTD QTY Net Inner Capacity 0.1 L

BULK

UN number UN1760
UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE)
Class 8
Packing group II

Environmental hazards

Marine pollutant Yes

ERG Number 8L

IMDG**FINISHED GOODS**

UN number UN1760

UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE), Limited Quantity

Class 8

Packing group II

Environmental Hazards

Marine pollutant No.

Transport hazard class(es)

Label(s) Limited Quantity

EmS F-A, S-B

LTD QTY Net Inner Capacity 1.0 L

BULK

UN number UN1760

UN proper shipping name CORROSIVE LIQUID, N.O.S. (AMMONIUM HYDROXIDE, ETHANOLAMINE), MARINE POLLUTANT (P-PHENYLENEDIAMINE, GLYCERYL LAURYL ETHER)

Class 8

Packing group II

Environmental hazards

Marine pollutant Yes

EmS F-A, S-B

General information

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant. In accordance with international transport regulations products associated with this document have been determined to have a flash point greater than 35°C and fire point greater than 100°C, therefore these materials are exempt from flammable liquid transport regulations.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

AMMONIUM HYDROXIDE (CAS 1336-21-6) Listed.

ETHANOL (CAS 64-17-5) Listed.

P-PHENYLENEDIAMINE (CAS 106-50-3) Listed.

RESORCINOL (CAS 108-46-3) Listed.

TOLUENE-2,5-DIAMINE (CAS 95-70-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No (Exempt)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
AMMONIUM HYDROXIDE	1336-21-6	< 7
P-PHENYLENEDIAMINE	106-50-3	< 2
TOLUENE-2,5-DIAMINE	95-70-5	< 0.6

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

P-PHENYLENEDIAMINE (CAS 106-50-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

ETHANOL (CAS 64-17-5)

Low priority

RESORCINOL (CAS 108-46-3)

Low priority

16. Other information, including date of preparation or last revision

Issue date 12-17-2019

Revision date 01-28-2020

Version # 02

NFPA ratings Health: 3
Flammability: 2
Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information Product and Company Identification: Product and Company Identification - L'Oreal
Hazard(s) identification: Hazard statement
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Ecological information: Ecotoxicity