SAFETY DATA SHEET

1. Identification

Product identifier **MATRIX SOCOLOR PERMANENT HAIR COLORS - GROUP 1**

Other means of identification

SDS number 80-21-0000395

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 1B
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1A

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist/vapors. Wash thoroughly after handling. 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.
Storage	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	%
COCAMIDE MEA		68140-00-1	18
STEARAMIDE MEA		111-57-9	5.7
AMMONIUM HYDROXIDE		1336-21-6	< 5
GLYCERIN		56-81-5	3
PEG-2 OLEAMINE		26635-93-8	3
ETHANOLAMINE		141-43-5	< 2
HYDROXYBENZOMORPHOLINE		26021-57-8	< 2
P-PHENYLENEDIAMINE		106-50-3	< 0.9
4-AMINO-2-HYDROXYTOLUENE		2835-95-2	< 0.6
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE		155601-30-2	≤ 0.7
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE		54381-16-7	< 0.2
M-AMINOPHENOL		591-27-5	< 0.2
P-AMINOPHENOL		123-30-8	≤ 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	Move to fresh air. Call a physician if symptoms develop or persist.
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.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. 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	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	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.
Methods and materials for containment and cleaning up	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. 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	Do not breathe mist/vapors. Do not get in eyes, on skin, or on 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 locked up. 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
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m3	
		50 ppm	
ETHANOLAMINE (CAS 141-43-5)	PEL	6 mg/m3	
		3 ppm	
GLYCERIN (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
P-PHENYLENEDIAMINE (CAS 106-50-3)	PEL	0.1 mg/m3	

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

Components	Type	Value	Form
GLYCERIN (CAS 56-81-5)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm
	TWA	25 ppm
ETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
P-PHENYLENEDIAMINE (CAS 106-50-3)	TWA	0.1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3
		25 ppm
ETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m3
		6 ppm
	TWA	8 mg/m3
		3 ppm
P-PHENYLENEDIAMINE (CAS 106-50-3)	TWA	0.1 mg/m3

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. 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 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. Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

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. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Cream.
Color	Not available.
Odor	Characteristic.
Odor threshold	Not available.
pH	9.8 - 10.2
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	> 212.0 °F (> 100.0 °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.
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. 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	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.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
MATRIX SOCOLOR PERMANENT HAIR COLORS - GROUP 1		
Acute		
Dermal		
ATEmix		94430 mg/kg
Oral		
ATEmix		5749 mg/kg

Components	Species	Test Results
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE (CAS 155601-30-2)		
Acute		
Inhalation		
Aerosol		
LD50	Rat	> 5.24 mg/m3, 4 h OECD 403
Oral		
LD50	Rat	> 2000 mg/kg OECD 401
4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)		
Acute		
Oral		
LD50	Rat	3600 mg/kg
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
Acute		
Inhalation		
LC50	Rat	11590 mg/l, 1 h
Oral		
LD50	Rat	350 mg/kg OECD 401
COCAMIDE MEA (CAS 68140-00-1)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg bw
Oral		
LD50	Rat	> 3000 mg/kg bw OECD 401
ETHANOLAMINE (CAS 141-43-5)		
Acute		
Dermal		
LD50	Rabbit	2504 mg/kg OECD 402
Inhalation		
Vapor		
LC50	Rat	> 1.3 mg/l, 6 h
Oral		
LD50	Rat	1515 mg/kg OECD 401
GLYCERIN (CAS 56-81-5)		
Acute		
Dermal		
LD50	Rabbit	> 18700 mg/kg bw

Components	Species	Test Results
Inhalation		
LC50	Rat	> 570 mg/L air, 1 h
Oral		
LD50	Rat	27200 mg/kg bw
HYDROXYBENZOMORPHOLINE (CAS 26021-57-8)		
Acute		
Oral		
LD50	Rat	1000 - 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		
Dermal		
LD50	-	428 mg/kg
Inhalation		
LC50	-	0.9 mg/l, 4 h
Oral		
LD50	Rat	264 mg/kg
P-AMINOPHENOL (CAS 123-30-8)		
Acute		
Dermal		
LD50	Rabbit	> 8000 mg/kg EPA OPTTS 870.1200
Inhalation		
Dust		
LC50	Rat	> 3.42 mg/l, 4 h OECD 403
Oral		
LD50	Rat	671 mg/kg EPA OPPTS 870.1100
PEG-2 OLEAMINE (CAS 26635-93-8)		
Acute		
Oral		
LD50	Rat	1260 mg/kg OECD 401
P-PHENYLENEDIAMINE (CAS 106-50-3)		
Acute		
Dermal		
LD50	Rabbit	> 7940 mg/kg
Inhalation		
Vapor or aerosol		
LC50	Rat	0.92 mg/l, 4 Hours
Oral		
LD50	Rat	80 - 100 mg/kg bw
STEARAMIDE MEA (CAS 111-57-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
		> 2000 mg/kg, 24 Hours

Components	Species	Test Results
Oral		
LD50	Rat	> 3000 mg/kg
		> 2000 mg/kg OECD 401

Skin corrosion/irritation Causes severe skin burns and eye damage.

Irritation Corrosion - Skin

ETHANOLAMINE	OECD 404 Result: Corrosive Species: Rabbit
PEG-2 OLEAMINE	OECD 404 Result: Corrosive Species: Rabbit
AMMONIUM HYDROXIDE	OECD 404 Result: Corrosive Species: Rat
COCAMIDE MEA	OECD 404 Result: Irritating Species: Rabbit
HYDROXYBENZOMORPHOLINE	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
STEARAMIDE MEA	OECD 404, Based on test data for structurally similar materials. Result: Irritating Species: Rabbit
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	OECD 439 Result: Not Irritating Species: In vitro
4-AMINO-2-HYDROXYTOLUENE	OECD 439 Result: Not Irritating Species: RhE
P-PHENYLENEDIAMINE	Result: Not Irritating Species: Guinea pig
GLYCERIN	Result: Not 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
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	OECD 405 Result: Corrosive Species: Rabbit
COCAMIDE MEA	OECD 405 Result: Corrosive Species: Rabbit
ETHANOLAMINE	OECD 405 Result: Corrosive Species: Rabbit
P-PHENYLENEDIAMINE	OECD 405 Result: Irritating Species: Rabbit
M-AMINOPHENOL	OECD 405 Result: Not Irritating Species: Rabbit

Irritation Corrosion - Eye

STEARAMIDE MEA	OECD 405, Based on test data for structurally similar materials. Result: Corrosive Species: Rabbit
HYDROXYBENZOMORPHOLINE	OECD 405, OECD 405 Result: Irritating Species: Rabbit
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
GLYCERIN	Result: Not Irritating Species: Rabbit

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Skin sensitization

GLYCERIN	167 mg/m3 air OECD 413, Inhalation Result: NOAEL Species: Rat Test Duration: 90 d
1-HYDROXYETHYL 4,5-DIAMINO PYRAZOLE SULFATE	EU Method B.6 - Cat 1 Result: Sensitizing Species: Guinea pig
COCAMIDE MEA	OECD 406 Result: Not Sensitizing Species: Guinea pig
HYDROXYBENZOMORPHOLINE	OECD 406 Result: Not sensitizing Species: Guinea pig
PEG-2 OLEAMINE	OECD 406 Result: Not Sensitizing Species: Guinea pig
P-AMINOPHENOL	OECD 406 Result: Sensitizing Species: Guinea pig
STEARAMIDE MEA	OECD 406, Based on test data for structurally similar materials. Result: Not Sensitizing Species: Guinea pig
4-AMINO-2-HYDROXYTOLUENE	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
ETHANOLAMINE	Result: Not Sensitizing Species: Guinea pig
GLYCERIN	Result: Not Sensitizing Species: Guinea pig
AMMONIUM HYDROXIDE	Result: Not Sensitzing 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

GLYCERIN	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.
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
COCAMIDE MEA	Result: In vitro tests did not show mutagenic effects
PEG-2 OLEAMINE	Result: In vitro tests did not show mutagenic effects
STEARAMIDE MEA	Result: In vitro tests did not show mutagenic effects
HYDROXYBENZOMORPHOLINE	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.
4-AMINO-2-HYDROXYTOLUENE	Result: In vitro tests showed mutagenic effects which were not observed with in vivo tests.
P-AMINOPHENOL	Result: In vivo tests showed mutagenic effects

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

P-PHENYLENEDIAMINE (CAS 106-50-3)	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 This product is not expected to cause reproductive or developmental effects.

Developmental effects

COCAMIDE MEA	> 1000 mg/kg bw/d OECD 414, No effects on development Result: NOEL 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
STEARAMIDE MEA	1000 mg/kg bw/d OECD 414, Based on test data for structurally similar materials. Species: Rat
GLYCERIN	1310 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat
PEG-2 OLEAMINE	150 mg/kg bw/d OECD 414 Result: NOEL Species: Rat
4-AMINO-2-HYDROXYTOLUENE	180 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
HYDROXYBENZOMORPHOLINE	500 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat

Reproductivity

P-AMINOPHENOL	100 mg/kg bw/d OECD 421 Result: NOAEL 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
GLYCERIN	2000 mg/kg bw/d, No effects on fertility Result: NOAEL Species: Rat
PEG-2 OLEAMINE	30 mg/kg bw/d OECD 422 Result: NOEL 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

Specific target organ toxicity - single exposure Not classified.

AMMONIUM HYDROXIDE	Result: Highly Irritating

Specific target organ toxicity - repeated exposure Not classified.

COCAMIDE MEA	> 750 mg/kg bw/d OECD 407 Result: NOAEL Species: Rat Test Duration: 28 d
STEARAMIDE MEA	> 750 mg/kg bw/d OECD 407, Oral Result: NOAEL Species: Rat Test Duration: 28 d
P-AMINOPHENOL	10 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
HYDROXYBENZOMORPHOLINE	125 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
ETHANOLAMINE	150 mg/m3 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
4-AMINO-2-HYDROXYTOLUENE	180 mg/kg bw/d OECD 408, Oral 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

Specific target organ toxicity - repeated exposure

ETHANOLAMINE	300 mg/kg bw/d OECD 416, Oral Result: NOAEL Species: Rat
PEG-2 OLEAMINE	5 mg/kg bw/d OECD 408 Result: NOEL 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 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			
Acute			
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
4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)			
Aquatic			
Acute			
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
Chronic			
Crustacea	NOEC	Daphnia magna	0.24 mg/l, 21 d OECD 211
AMMONIUM HYDROXIDE (CAS 1336-21-6)			
Aquatic			
Acute			
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
Chronic			
Crustacea	NOEC	Daphnia magna	0.79 mg/l, 21 d
Fish	NOEC	Oncorhynchus mykiss	1.2 mg/l, 61 d OECD 210
COCAMIDE MEA (CAS 68140-00-1)			
Aquatic			
Acute			
Algae	EC50	Desmodesmus subspicatus	3.9 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	3 mg/l, 48 h OECD 202

Components		Species	Test Results
Fish	LC50	Oncorhynchus mykiss	> 3 mg/l, 96 h OECD 203
Other	EC50	Pseudomonas putida	6000 mg/l, 16 h DIN 38412, Pt. 8
ETHANOLAMINE (CAS 141-43-5)			
Aquatic			
Acute			
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
Chronic			
Crustacea	NOEC	Daphnia magna	0.85 mg/l, 21 d OECD 211
Fish	NOEC	Oryzias latipes	1.24 mg/l, 41 d OECD 210
GLYCERIN (CAS 56-81-5)			
Aquatic			
Acute			
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
M-AMINOPHENOL (CAS 591-27-5)			
Acute			
Other	IC50	Tetrahymena pyriformis	361 mg/l, 40 h
Aquatic			
Acute			
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
Chronic			
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			
Acute			
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
Chronic			
Crustacea	NOEC	Daphnia magna	0.674 mg/l, 21 d OECD 211
P-AMINOPHENOL (CAS 123-30-8)			
Aquatic			
Acute			
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

Components		Species	Test Results
PEG-2 OLEAMINE (CAS 26635-93-8)			
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	0.0867 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0.043 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	0.1 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	128 mg/l, 3 h OECD 209
Chronic			
Algae	EC10	Pseudokirchneriella subcapitata	0.0341 mg/l, 72 h OECD 201
Crustacea	EC10	Daphnia magna	0.0011 mg/l, 21 d OECD 211
P-PHENYLENEDIAMINE (CAS 106-50-3)			
Aquatic			
Acute			
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
STEARAMIDE MEA (CAS 111-57-9)			
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	8.7 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	3 mg/l, 48 h OECD 202
Fish	LC50	Oncorhynchus mykiss	> 3 mg/l, 96 h OECD 203
Other	EC50	Pseudomonas putida	6 mg/l, 16 h
Chronic			
Crustacea	NOELR	Daphnia magna	< 1 mg/l, 21 d OECD 211
Fish	NOEC	Oncorhynchus mykiss	0.32 mg/l, 28 d OECD 204

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
4-AMINO-2-HYDROXYTOLUENE	0 % OECD 301 B Result: Not Readily Biodegradable Test Duration: 28 d
COCAMIDE MEA	99 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
ETHANOLAMINE	> 90 % OECD 301 A Result: Readily Biodegradable Test Duration: 21 d
GLYCERIN	OECD 301 Result: Readily Biodegradable
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	14.3 % OECD 301B Result: Not Readily Biodegradable Test Duration: 28 d
PEG-2 OLEAMINE	Result: Readily Biodegradable
P-PHENYLENEDIAMINE	28 - 30 % OECD 301 D Result: Not Readily Biodegradable Test Duration: 28 d
STEARAMIDE MEA	69 % OECD 301 D Result: Readily Biodegradable Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

4-AMINO-2-HYDROXYTOLUENE	-0.53 EU A.8 0.53 OECD 117
AMMONIUM HYDROXIDE	-2.66
ETHANOLAMINE	-2.3 OECD 107
GLYCERIN	-1.76
HYDROXYBENZOMORPHOLINE	0.22
M-AMINOPHENOL	5.6
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	-2.8 -2.8 OECD 107
P-AMINOPHENOL	0.25
PEG-2 OLEAMINE	3.4
P-PHENYLENEDIAMINE	-0.25

Bioconcentration factor (BCF)

P-AMINOPHENOL	10 - 46 OECD 305 C

Bioaccumulation

COCAMIDE MEA	Result: Bioaccumulation is unlikely.
ETHANOLAMINE	Result: Bioaccumulation is unlikely.
P-AMINOPHENOL	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.

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 (PEG-2 OLEAMINE)
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 (PEG-2 OLEAMINE)
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.

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

SARA 304 Emergency release notification

Ammonia (CAS 1336-21-6)	100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
AMMONIUM HYDROXIDE	1336-21-6	100	500		

SARA 311/312 Hazardous chemical No (Exempt)

SARA 313 (TRI reporting)
Not regulated.

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)

AMMONIUM HYDROXIDE (CAS 1336-21-6)

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

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

Issue date 01-11-2021

Revision date 06-21-2022

Version # 03

NFPA ratings Health: 3
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.

Revision information Product and Company Identification: Product and Company Identification - L'Oreal
Composition / Information on Ingredients: Ingredients
First-aid measures: Ingestion
Accidental release measures: Methods and materials for containment and cleaning up
Handling and storage: Conditions for safe storage, including any incompatibilities
Exposure controls/personal protection: Eye/face protection
Exposure controls/personal protection: Hand protection
Exposure controls/personal protection: Respiratory protection
Exposure controls/personal protection: Other
Stability and reactivity: Conditions to avoid
Toxicological information: Chronic effects
Toxicological information: Skin contact
Transport information: General information