

SAFETY DATA SHEET

1. Identification

Product identifier MATRIX SOCOLOR PERMANENT HAIR COLOR - GROUP 5

Other means of identification

SDS number 80-21-0000263

Recommended use Not available.

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 1
Serious eye damage/eye irritation Category 1

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement

Prevention Do not breathe mist/vapors. Wash thoroughly after handling. 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. 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

1.23% of the mixture consists of component(s) of unknown acute oral toxicity. 14.17% of the mixture consists of component(s) of unknown acute dermal toxicity.

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	< 6
AMMONIUM HYDROXIDE		1336-21-6	< 5
ETHANOLAMINE		141-43-5	< 2
GLYCERIN		56-81-5	≤ 3
PEG-2 OLEAMINE		26635-93-8	≤ 3
BASIC ORANGE 31		97404-02-9	≤ 0.2
RESORCINOL		108-46-3	≤ 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

Take off immediately all contaminated clothing. Rinse skin with water/shower. 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.

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. 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. 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.

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
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/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

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
RESORCINOL (CAS 108-46-3)	STEL	90 mg/m ³
		20 ppm
	TWA	45 mg/m ³
		10 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
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.
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. 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	Shaded
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	> 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. 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 COLOR - GROUP 5		
Acute		
Dermal		
ATEmix		94220 mg/kg
Oral		
ATEmix		5573 mg/kg
Components	Species	Test Results
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
Acute		
Inhalation		
LC50	Rat	11590 mg/l, 1 h
Oral		
LD50	Rat	350 mg/kg bw OECD 401
BASIC ORANGE 31 (CAS 97404-02-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg OECD 402
Oral		
LD50	Rat	1000 - 2000 mg/kg OECD 420

Components	Species	Test Results
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		
<i>Vapor</i>		
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
Inhalation		
LC50	Rat	> 570 mg/L air, 1 h
Oral		
LD50	Rat	27200 mg/kg bw
PEG-2 OLEAMINE (CAS 26635-93-8)		
Acute		
Oral		
LD50	Rat	1260 mg/kg OECD 401
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
STEARAMIDE MEA (CAS 111-57-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg > 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	> 3000 mg/kg > 2000 mg/kg OECD 401

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
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
RESORCINOL	OECD 404, (2.5%) Result: Not Irritating Species: Rabbit
STEARAMIDE MEA	OECD 404, Based on test data for structurally similar materials. Result: Irritating Species: Rabbit
BASIC ORANGE 31	OECD 439 Result: Not Irritating Species: RhE
GLYCERIN	Result: Not Irritating Species: Rabbit

Serious eye damage/eye irritation Causes serious eye damage.

Irritation Corrosion - Eye

RESORCINOL	FHLS Act, (100%) Result: Corrosive Species: Rabbit
COCAMIDE MEA	OECD 405 Result: Corrosive Species: Rabbit
ETHANOLAMINE	OECD 405 Result: Corrosive Species: Rabbit
RESORCINOL	OECD 405, (2.5%) Result: Not Irritating Species: Rabbit
STEARAMIDE MEA	OECD 405, Based on test data for structurally similar materials. Result: Corrosive Species: Rabbit
BASIC ORANGE 31	OECD 437 Result: Corrosive Species: BCOP
AMMONIUM HYDROXIDE	Result: Corrosive
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
COCAMIDE MEA	OECD 406 Result: Not Sensitizing Species: Guinea pig
PEG-2 OLEAMINE	OECD 406 Result: Not Sensitizing Species: Guinea pig

Skin sensitization

STEARAMIDE MEA

OECD 406, Based on test data for structurally similar materials.

Result: Not Sensitizing

Species: Guinea pig

BASIC ORANGE 31

OECD 429

Result: Sensitizing

Species: Mouse

RESORCINOL

OECD 429

Result: Sensitizing

Species: Mouse

ETHANOLAMINE

Result: Not Sensitizing

Species: Guinea pig

GLYCERIN

Result: Not Sensitizing

Species: Guinea pig

AMMONIUM HYDROXIDE

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

GLYCERIN

Result: In vitro and in vivo tests did not show mutagenic effects.

ETHANOLAMINE

Result: In vitro and in vivo tests did 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

BASIC ORANGE 31

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.

Carcinogenicity

Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

RESORCINOL (CAS 108-46-3)

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

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

RESORCINOL

250 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

BASIC ORANGE 31

60 mg/kg bw/d

Result: NOAEL

Species: Rat

Reproductivity

GLYCERIN

2000 mg/kg bw/d, No effects on fertility

Result: NOAEL

Species: Rat

Reproductivity		
RESORCINOL		245 mg/kg bw/d OECD 416 Result: NOAEL Species: Rat
PEG-2 OLEAMINE		30 mg/kg bw/d OECD 422 Result: NOEL 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
ETHANOLAMINE		150 mg/m ³ air OECD 412, Inhalation Result: NOAEC Species: Rat Test Duration: 28 d
PEG-2 OLEAMINE		300 mg/kg bw/d OECD 416, Oral Result: NOAEL Species: Rat
BASIC ORANGE 31		5 mg/kg bw/d OECD 408 Result: NOEL Species: Rat Test Duration: 90 d
RESORCINOL		60 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
GLYCERIN		80 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
RESORCINOL		8000 mg/kg bw/d, Oral Result: NOAEL Species: Rat Test Duration: 2 yr
		991 mg/m ³ Result: NOAEC Species: Rat Test Duration: 14 d
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful. 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.	

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
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
Aquatic		
<i>Acute</i>		
Algae	EC50 Chlorella vulgaris	2700 mg/l, 18 d

Components		Species	Test Results
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
BASIC ORANGE 31 (CAS 97404-02-9)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	17 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	3.2 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	> 100 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	44.5 mg/l, 3 h OECD 209
COCAMIDE MEA (CAS 68140-00-1)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	3.9 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	6000 mg/l, 16 h DIN 38412, Pt. 8
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
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
PEG-2 OLEAMINE (CAS 26635-93-8)			
Aquatic			
<i>Acute</i>			
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
<i>Chronic</i>			
Algae	EC10	Pseudokirchneriella subcapitata	0.0341 mg/l, 72 h OECD 201
Crustacea	EC10	Daphnia magna	0.0011 mg/l, 21 d OECD 211

Components	Species		Test Results
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
STEARAMIDE MEA (CAS 111-57-9)			
Aquatic			
<i>Acute</i>			
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
<i>Chronic</i>			
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)

BASIC ORANGE 31	1 - 2 % 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
PEG-2 OLEAMINE	Result: Readily Biodegradable
RESORCINOL	66.7 % OECD 301 C Result: Readily Biodegradable Test Duration: 14 d
STEARAMIDE MEA	69 % OECD 301 D Result: Readily Biodegradable Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

BASIC ORANGE 31	-2.13 OECD 107
ETHANOLAMINE	-2.3 OECD 107
GLYCERIN	-1.76
PEG-2 OLEAMINE	3.4
RESORCINOL	0.8

Bioaccumulation

COCAMIDE MEA	Result: Bioaccumulation is unlikely.
ETHANOLAMINE	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
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
Read safety instructions, SDS and emergency procedures before handling.	

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
Read safety instructions, SDS and emergency procedures before handling.	

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
Class 8
Packing group II
Environmental hazards
Marine pollutant Yes
EmS F-A, S-B

Read safety instructions, SDS and emergency procedures before handling.

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.
RESORCINOL (CAS 108-46-3) 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	< 5

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
RESORCINOL (CAS 108-46-3) Low priority

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

Issue date 10-23-2019
Version # 01
NFPA ratings Health: 3
Flammability: 0
Instability: 0

Disclaimer

Matrix cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.