

SAFETY DATA SHEET

1. Identification

Product identifier	BIOLAGE ACID WAVING LOTION
Other means of identification	
SDS number	00-32-0000322
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 1
	Sensitization, skin	Category 1A
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.
Precautionary statement	
Prevention	Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. 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. Immediately call a poison center/doctor. If skin irritation or rash occurs: 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	%
AMMONIUM HYDROXIDE		1336-21-6	1.85
ISOCETETH-20		52609-19-5	1.05
AMMONIUM CHLORIDE		12125-02-9	1
AMMONIUM THIOGLYCOLATE		5421-46-5	0.12

*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. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. 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 immediately.
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. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
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. Wash contaminated clothing before reuse.

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. Avoid breathing 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	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 get this material in contact with eyes. Avoid breathing 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
AMMONIUM HYDROXIDE (CAS 1336-21-6)	PEL	35 mg/m3 50 ppm

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

Components	Type	Value	Form
AMMONIUM CHLORIDE (CAS 12125-02-9)	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	Form
AMMONIUM CHLORIDE (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
AMMONIUM THIOGLYCOLATE (CAS 5421-46-5)	TWA	1 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
AMMONIUM CHLORIDE (CAS 12125-02-9)	STEL	20 mg/m3	Fume.
	TWA	10 mg/m3	Fume.
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	27 mg/m3	
		35 ppm	
	TWA	18 mg/m3	
		25 ppm	

Biological limit values

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

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

AMMONIUM THIOGLYCOLATE (CAS 5421-46-5)

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. Provide eyewash station and safety shower.

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.
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9. Physical and chemical properties**Appearance**

Physical state Liquid.

Color Pale yellow.

Odor Characteristic.

Odor threshold Not available.

pH 9.5 - 10

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

Density 0.98 - 1.05 g/cm³

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	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
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. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

Product	Species	Test Results
BIOLAGE ACID WAVING LOTION		
Acute		
Dermal		
ATEmix		104800 mg/kg
Oral		
ATEmix		16670 mg/kg
Components	Species	Test Results
AMMONIUM CHLORIDE (CAS 12125-02-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg EU Method B.3
Oral		
LD50	Rat	1410 mg/kg OECD 401
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
Acute		
Inhalation		
LC50	Rat	11590 mg/l, 1 h
Oral		
LD50	Rat	350 mg/kg bw OECD 401
AMMONIUM THIOGLYCOLATE (CAS 5421-46-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg OECD 402
Inhalation		
<i>Aerosol</i>		
LC50	Rat	2.75 mg/l, 1 h
Oral		
LD50	Rat	71 mg/kg OECD 401
ISOCETETH-20 (CAS 52609-19-5)		
Acute		
Dermal		
LD50	Rabbit	2000 mg/kg, 24 Hours

Components	Species	Test Results
Oral LD50	Rat	> 10000 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Irritation Corrosion - Skin		
AMMONIUM CHLORIDE		Draize Result: Not Irritating Species: Rabbit
AMMONIUM HYDROXIDE		OECD 404 Result: Corrosive Species: Rat
AMMONIUM THIOGLYCOLATE		OECD 404 Result: Slightly Irritating Species: Rabbit
Serious eye damage/eye irritation	Causes serious eye damage.	
Irritation Corrosion - Eye		
AMMONIUM THIOGLYCOLATE		OECD 405 Result: Slightly Irritating Species: Rabbit
AMMONIUM HYDROXIDE		Result: Corrosive
AMMONIUM CHLORIDE		Result: Irritating Species: Rabbit
Respiratory or skin sensitization		
ACGIH sensitization		
THIOGLYCOLIC ACID AND SALTS (CAS 5421-46-5)		Dermal 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		
AMMONIUM THIOGLYCOLATE		OECD 429 Result: Sensitizing Species: Mouse
AMMONIUM CHLORIDE		Result: Not Sensitizing Species: Guinea pig
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		
AMMONIUM HYDROXIDE		Result: In vitro tests did not show mutagenic effects
AMMONIUM THIOGLYCOLATE		Result: In vitro tests did not show mutagenic effects
AMMONIUM CHLORIDE		Result: In vitro tests showed mutagenic effects which were not observed with in vivo tests.
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		
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	Due to partial or complete lack of data the classification is not possible.	
Developmental effects		
AMMONIUM THIOGLYCOLATE		75 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
AMMONIUM CHLORIDE		8.9 mg/kg bw/d Result: NOAEL Species: Rat
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.	

Specific target organ toxicity - single exposure

AMMONIUM HYDROXIDE

Result: Highly Irritating

Specific target organ toxicity - repeated exposure

AMMONIUM CHLORIDE

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

1695 mg/kg bw/d OECD 408

Result: NOAEL

Species: Rat

Test Duration: 90 d

Aspiration hazard

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

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
AMMONIUM CHLORIDE (CAS 12125-02-9)			
Aquatic			
Crustacea	EC50	American lobster (Homarus americanus)	0.237 - 0.288 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.42 - 0.56 mg/l, 96 hours
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
AMMONIUM THIOGLYCOLATE (CAS 5421-46-5)			
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	13 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	39 mg/l, 48 h
Fish	LC50	Oncorhynchus mykiss	> 100 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	530 mg/l, 3 h OECD 209

Persistence and degradability**Biodegradability****Percent degradation (Aerobic biodegradation)**

AMMONIUM THIOGLYCOLATE

100 % OECD 301 C

Result: Readily Biodegradable

Test Duration: 28 d

Bioaccumulative potential**Partition coefficient n-octanol / water (log Kow)**

AMMONIUM THIOGLYCOLATE

-2.99 Estimated

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)

AMMONIUM CHLORIDE (CAS 12125-02-9) Listed.

AMMONIUM HYDROXIDE (CAS 1336-21-6) 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 CHLORIDE	12125-02-9	1
AMMONIUM HYDROXIDE	1336-21-6	1.85

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 04-03-2020

Version #
NFPA ratings

01
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.