

SAFETY DATA SHEET

1. Identification

Product identifier BIOLAGE BOND THERAPHY BOND FIX PRE-TREATMENT

Other means of identification

SDS number 00-12-0001348

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 Serious eye damage/eye irritation Category 1
Specific target organ toxicity, repeated exposure Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Do not breathe mist/vapors. Wear eye protection/face protection.

Response 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.

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.

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
CITRIC ACID		77-92-9	1.6

*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	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. 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.
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 breathe mist/vapors. Do not get this material in contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
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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/m3	Respirable fraction.
		15 mg/m3	Total dust.

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.

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. Provide eyewash station.

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.

Color Not available.

Odor Characteristic.

Odor threshold Not available.

pH 3.5 - 4.5

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	>= 0.97 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. 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	No adverse effects due to skin contact are expected.
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.
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Information on toxicological effects

Acute toxicity	Not known.
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Product	Species	Test Results
BIOLAGE BOND THERAPHY BOND FIX PRE-TREATMENT		
<u>Acute</u>		
Dermal		
ATEmix		70470 mg/kg
Oral		
ATEmix		43800 mg/kg
Components	Species	Test Results
BEHENTRIMONIUM CHLORIDE (CAS 68607-24-9)		
<u>Acute</u>		
Oral		
LD50	Rat	3190 mg/kg OECD 401

Components	Species	Test Results
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
GLYCERIN (CAS 56-81-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 18700 mg/kg bw
Inhalation		
LC50	Rat	> 570 mg/L air, 1 h
Oral		
LD50	Rat	27200 mg/kg bw
Skin corrosion/irritation	No adverse effects due to skin contact are expected.	
Irritation Corrosion - Skin		
CITRIC ACID		OECD 404 Result: Slightly Irritating Species: Rabbit
BEHENTRIMONIUM CHLORIDE		OECD 405 Result: Irritating Species: Rabbit
GLYCERIN		Result: Not Irritating Species: Rabbit
Serious eye damage/eye irritation	Causes serious eye damage.	
Irritation Corrosion - Eye		
BEHENTRIMONIUM CHLORIDE		OECD 404 Result: Corrosive Species: Rabbit
CITRIC ACID		OECD 405 Result: 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
CITRIC ACID		OECD 406 Result: Not Sensitizing Species: Guinea pig
GLYCERIN		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.
BEHENTRIMONIUM 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

GLYCERIN

1310 mg/kg bw/d, No effects on development
Result: NOAEL
Species: Rat

Reproductivity

GLYCERIN

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

CITRIC ACID

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

BEHENTRIMONIUM CHLORIDE

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

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

CITRIC ACID

Test Duration: 28 d
4000 mg/kg bw/d, Oral
Result: NOAEL

GLYCERIN

Species: Rat
Test Duration: 10 d
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			
Acute			
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

Components		Species	Test Results
<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
Other	EC50	Pseudomonas putida	4235 mg/l, 18 h OECD 209
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

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

GLYCERIN

OECD 301
Result: Readily Biodegradable

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

CITRIC ACID

-1.64

GLYCERIN

-1.76

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)

Not 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)

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.

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 12-12-2022

Version # 01

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.