

1. Identification

Product identifier MIZANI ANTI-DANDRUFF CONDITIONER

Other means of identification

SDS number 00-12-0001325

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
Reproductive toxicity (the unborn child) Category 1B
Specific target organ toxicity, repeated exposure Category 1

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/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 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	%
BEHENTRIMONIUM CHLORIDE		68607-24-9	< 4
AMODIMETHICONE		68554-54-1	< 2
GLYCERIN		56-81-5	≤ 2
PEG-180		25322-68-3	≤ 2
ZINC PYRITHIONE		13463-41-7	≤ 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	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 exposed or concerned: Get medical advice/attention. 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. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

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

6. Accidental release measures

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

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

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

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

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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not get this material in contact with eyes. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. 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.

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
PEG-180 (CAS 25322-68-3)	TWA	10 mg/m3

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

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

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Cream.
Color	White.

Odor Not available.

Odor threshold Not available.

pH 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 >= 0.98 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.	
Information on toxicological effects		
Acute toxicity	Not known.	
Product	Species	Test Results
MIZANI ANTI-DANDRUFF CONDITIONER		
Acute		
Dermal		
ATEmix		123600 mg/kg
Oral		
ATEmix		15980 mg/kg
Components	Species	Test Results
AMODIMETHICONE (CAS 68554-54-1)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 8000 mg/kg
BEHENTRIMONIUM CHLORIDE (CAS 68607-24-9)		
Acute		
Oral		
LD50	Rat	3190 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-180 (CAS 25322-68-3)		
Acute		
Dermal		
LD50	Rat	> 2500 mg/kg, 24 Hours
Oral		
LD50	Rat	4300 mg/kg
ZINC PYRITHIONE (CAS 13463-41-7)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg EPA OPP 81-2 100 mg/kg
Inhalation		
LC50	Rat	1.03 mg/l, 4 h OECD 403
Oral		
LD50	Rat	269 mg/kg OECD 401
Skin corrosion/irritation	No adverse effects due to skin contact are expected.	
Irritation Corrosion - Skin		
ZINC PYRITHIONE	OECD 404 Result: Not Irritating Species: Rabbit	

Irritation Corrosion - Skin

BEHENTRIMONIUM CHLORIDE

OECD 405

Result: Irritating

Species: Rabbit

AMODIMETHICONE

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

ZINC PYRITHIONE

OECD 405

Result: Corrosive

Species: Rabbit

AMODIMETHICONE

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.

Sensitization

ZINC PYRITHIONE

OECD 406

Result: Not Sensitizing

Species: Guinea pig

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

AMODIMETHICONE

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

GLYCERIN

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

ZINC PYRITHIONE

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

AMODIMETHICONE

Result: In vitro 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

May damage the unborn child.

Developmental effects

ZINC PYRITHIONE

0.75 mg/kg bw/d EPA OPP 83-3

Result: NOAEL

Species: Rat

Developmental effects

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

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** Causes damage to organs through prolonged or repeated exposure.

ZINC PYRITHIONE

0.5 mg/kg bw/d OECD 453, Oral

Result: NOAEL

Species: Rat

Test Duration: 728 d

0.5 mg/m3 air EPA OPP 82-4, Inhalation

Result: NOAEL

Species: Rat

Test Duration: 90 d

BEHENTRIMONIUM CHLORIDE

10 mg/kg bw/d OECD 407, Oral

Result: NOAEL

Species: Rat

Test Duration: 28 d

ZINC PYRITHIONE

100 mg/kg bw/d EPA OPP 82-3, Dermal

Result: NOAEL

Species: Rat

Test Duration: 90 d

GLYCERIN

8000 mg/kg bw/d, Oral

Result: NOAEL

Species: Rat

Test Duration: 2 yr

Aspiration hazard Not an aspiration hazard.**Chronic effects** Causes 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
AMODIMETHICONE (CAS 68554-54-1)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	11 mg/l, 48 h OECD 202
BEHENTRIMONIUM CHLORIDE (CAS 68607-24-9)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	3.48 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	1.39 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	0.5 - 1 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	43 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0.128 mg/l, 21 d OECD 211
Fish	NOEC	Danio rerio	0.24 mg/l, 9 d OECD 212

Components		Species	Test Results
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
PEG-180 (CAS 25322-68-3)			
Aquatic			
Fish	LC50	Atlantic salmon (Salmo salar)	> 1000 mg/l, 96 hours
ZINC PYRITHIONE (CAS 13463-41-7)			
Aquatic			
Acute			
Algae	EC50	Skeletonema costatum	0.0012 mg/l, 120 h EPA OPP 72-2
Crustacea	EC50	Daphnia magna	0.0082 mg/l, 48 h TG 202
Fish	LC50	Pimephales promelas	0.0026 mg/l, 96 h TG 203
Other	EC50	Activated sludge of a predominantly domestic sewage	2.4 mg/l, 3 h OECD 209
Chronic			
Crustacea	NOEC	Daphnia magna	0.0082 mg/l, 21 d EPA OPP 72-4

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

AMODIMETHICONE

Result: Not Readily Biodegradable

BEHENTRIMONIUM CHLORIDE

80 % OECD 301

Result: Readily Biodegradable

Test Duration: 28 d

GLYCERIN

OECD 301

Result: Readily Biodegradable

ZINC PYRITHIONE

39 % OECD 301 B

Result: Not Readily Biodegradable

Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

GLYCERIN

-1.76

ZINC PYRITHIONE

0.883 OECD 107

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

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC PYRITHIONE), MARINE POLLUTANT
Class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Transport hazard class(es)	
Label(s)	9
Special provisions	8, 146, 173, 335, IB3, T4, TP1, TP29
Packaging non bulk	203

IATA**FINISHED GOODS**

Not regulated as dangerous goods.

BULK

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC PYRITHIONE)
Class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
ERG Number	9L

IMDG**FINISHED GOODS**

Not regulated as dangerous goods.

BULK

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC PYRITHIONE), MARINE POLLUTANT
Class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F

General information Packagings containing a net quantity per single package or inner packaging of 5L or less are not subject transportation restrictions except for general packing provisions.

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)

ZINC PYRITHIONE (CAS 13463-41-7) 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.
ZINC PYRITHIONE	13463-41-7	≤ 1

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 11-02-2022

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.