SAFETY DATA SHEET



1. Identification

Product identifier	REDKEN ACIDIC PROTEIN AMINO CONCENTRATE
Other means of identification SDS number	00-12-0000697
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 protect	ction/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	%
BEHENTRIMONIUM CHLORIDE		68607-24-9	4.74
ARGININE		74-79-3	2
GLYCERIN		56-81-5	1.7
ISOPROPYL ALCOHOL		67-63-0	1.08

*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 (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	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.
Environmental precautions	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.
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.

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.

Components	Туре)	Va	lue	Form
GLYCERIN (CAS 56-81-5)) PEL		5 n	ng/m3	Respirable fraction.
			15	mg/m3	Total dust.
ISOPROPYL ALCOHOL (CAS 67-63-0)	PEL		980) mg/m3	
			40) ppm	
US. ACGIH Threshold Lin	nit Values				
Components	Туре)	Va	lue	
ISOPROPYL ALCOHOL (CAS 67-63-0)	STE	<u> </u>	400) ppm	
	TWA		200) ppm	
US. NIOSH: Pocket Guide	e to Chemical Hazards				
Components	Туре)	Va	lue	
ISOPROPYL ALCOHOL (CAS 67-63-0)	STEI	L	12:	25 mg/m3	
			50) ppm	
	TWA		980) mg/m3	
			40) ppm	
Components ISOPROPYL ALCOHOL	Value 40 mg/l	Determinant Acetone	Specimen Urine	Sampling *	line
	40 mg/l	Acetone	Urine	*	
(CAS 67-63-0) * - For sampling details, pl	ease see the source doc	ument.			
propriate engineering trols	Good general ventil applicable, use pro	lation should be us cess enclosures, lo evels below recom	ocal exhaust venti mended exposure	lation, or othe limits. If expo	matched to conditions. If r engineering controls to sure limits have not beer eyewash station.
vidual protection measur	es, such as personal p	rotective equipme	ent		
Eye/face protection	Applicable for indus facepiece.	strial settings only.	Chemical respira	tor with organi	c vapor cartridge and full
Skin protection Hand protection	Applicable for indus	strial settings only.	Wear appropriate	chemical res	stant gloves.
Other	Applicable for indus impervious apron is		Wear appropriate	chemical res	stant clothing. Use of an
Respiratory protection		Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full			
	Applicable for indus facepiece.	strial settings only.	Chemical respira	tor with organi	
Thermal hazards				-	
Thermal hazards	facepiece. Wear appropriate th Always observe goo	nermal protective c od personal hygier drinking, and/or sm	lothing, when neo	cessary. h as washing a	after handling the materia
Thermal hazards neral hygiene siderations	facepiece. Wear appropriate the Always observe good and before eating, of equipment to remove	nermal protective c od personal hygier drinking, and/or sm	lothing, when neo	cessary. h as washing a	after handling the materia
	facepiece. Wear appropriate the Always observe good and before eating, of equipment to remove	nermal protective c od personal hygier drinking, and/or sm	lothing, when neo	cessary. h as washing a	after handling the materia

Physical state	Liquid.
Form	Cream.

Color	White.
Odor	Characteristic.
Odor threshold	Not available.
рН	3.5 - 4.5
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 exp	losive 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/cm ³
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.
1	Other an antidicing a second

Incompatible materialsStrong oxidizing agents.Hazardous decompositionNo hazardous decomposition products are known.productsNo 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	Tes	st Results
REDKEN ACIDIC PROTEIN AI	MINO CONCENTRATE		
Acute			
Dermal		100	
ATEmix		100)100 mg/kg
Oral		404	100
ATEmix			l00 mg/kg
Components	Species	les	st Results
ARGININE (CAS 74-79-3) <u>Acute</u>			
Oral			
LD50	Rat	379	02 mg/kg
BEHENTRIMONIUM CHLORIE			
Acute	DE (070 00007-24-3)		
Oral			
LD50	Rat	319	00 mg/kg OECD 401
GLYCERIN (CAS 56-81-5)			
Acute			
Dermal			
LD50	Rabbit	> 18	8700 mg/kg bw
Inhalation			
LC50	Rat	> 57	70 mg/L air, 1 h
Oral			
LD50	Rat	272	200 mg/kg bw
ISOPROPYL ALCOHOL (CAS	67-63-0)		
Acute			
Dermal			
LD50	Rabbit	16.4	4 ml/kg bw OECD 402
Inhalation			
Vapor			
LC50	Rat	> 1(0000 ppm, 6 Hours OECD 403
Oral			
LD50	Rat	584	0 mg/kg OECD 401
Skin corrosion/irritation	Due to partial or complete la skin contact are expected.	ack of data the classification is	not possible. No adverse effects due to
Irritation Corrosion -			
BEHENTRIMONI	UM CHLORIDE	OECD 405 Result: Irritating	
		Species: Rabbit	
GLYCERIN		Result: Not Irritating Species: Rabbit	
ISOPROPYL ALC	COHOL	Result: Not Irritating Species: Rabbit	
Serious eye damage/eye irritation	Causes serious eye damag	9.	
Irritation Corrosion -	· Eye		
BEHENTRIMONI	UM CHLORIDE	OECD 404	
		Result: Corrosive Species: Rabbit	
ISOPROPYL ALC	COHOL	OECD 405	
		Result: Severely Irritating	
GLYCERIN		Species: Rabbit Result: Not Irritating	
		Species: Rabbit	
Material name: REDKEN ACIDIC	PROTEIN AMINO CONCENTRATE		SDS US

Respiratory or skin sensitizatior		
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	Due to partial or complete lac	k of data the classification is not possible.
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
ISOPROPYL ALCOF	łOL	OECD 406 Result: Not Sensitizing Species: Guinea pig
GLYCERIN		Result: Not Sensitizing Species: Guinea pig
Germ cell mutagenicity	Due to partial or complete lac	k of data the classification is not possible.
Mutagenicity GLYCERIN		Result: In vitro and in vivo tests did not show mutagenic
ISOPROPYL ALCOH	IOL	effects. 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 carcino classification is not possible.	genicity to humans. Due to partial or complete lack of data the
Not listed. OSHA Specifically Regulate Not regulated. US. National Toxicology Pro	Evaluation of Carcinogenicity d Substances (29 CFR 1910.1 ogram (NTP) Report on Carcii	1001-1052)
Not listed. Reproductive toxicity	Due to partial or complete lac	k of data the classification is not possible.
-		or data the classification is not possible.
Developmental effects GLYCERIN		1310 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat
ISOPROPYL ALCOF	łOL	400 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rabbit
Reproductivity ISOPROPYL ALCOF	IOL	1000 mg/kg bw/d OECD 416, No effects on fertility Result: NOAEL Species: Rat
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	Due to partial or complete lac	k of data the classification is not possible.
Specific target organ toxicity - repeated exposure		s through prolonged or repeated exposure.
BEHENTRIMONIUM CHLORI	DE	10 mg/kg bw/d OECD 407, Oral Result: NOAEL Species: Rat Test Duration: 28 d
ISOPROPYL ALCOHOL		5000 ppm OECD 413, Inhalation Result: NOALE Species: Rat Test Duration: 90 d

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 6	8607-24-9)		
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	
Chronic				
Crustacea	NOEC	Daphnia magna	0.128 mg/l, 21 d OECD 211	
Fish	NOEC	Danio rerio	0.24 mg/l, 9 d OECD 212	
GLYCERIN (CAS 56-8	31-5)			
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	
ISOPROPYL ALCOHO	DL (CAS 67-63-0)			
Aquatic				
Acute				
Algae	EC50	Scenedesmus quadricauda	> 1000 mg/l, 72 h	
Crustacea	EC50	Daphnia magna	9714 mg/l, 24 h OECD 202	
Fish	LC50	Pimephales promelas	9640 mg/l, 96 h OECD 203	
Other	TD	Pseudomonas putida	1050 mg/l, 16 DIN 38412, Pt. 8	
sistence and degrada	bility			
Biodegradability Percent degrada BEHENTRIMONI	tion (Aerobic biod JM CHLORIDE	egradation) 80 % OECD 301 Result: Readily Biodeg Test Duration: 28 d	gradable	
GLYCERIN		OECD 301		
ISOPROPYL ALC	OHOL	95 % OECD 301 E	95 % OECD 301 E Result: Readily Biodegradable	
accumulative potentia	al			
Partition coefficient r	n-octanol / water (•		
		-4.2		
GLYCERIN		-1.76		

Partition coefficient n-octa	nol / water (log Kow)	
ISOPROPYL ALCOHOL	0.05	
Bioaccumulation		
ISOPROPYL ALCOHOL	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

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

for nogalatory informati				
US federal regulations	This product is a "Ha Standard, 29 CFR 19		efined by the OSHA Hazard	l Communica
Toxic Substances Contro	l Act (TSCA)			
TSCA Section 12(b) E	Export Notification (40 C	FR 707, Subpt. D)		
Not regulated.				
CERCLA Hazardous Subs	stance List (40 CFR 302	.4)		
ISOPROPYL ALCOHO)L (CAS 67-63-0)	Listed.		
SARA 304 Emergency rele	ease notification			
Not regulated.				
OSHA Specifically Regula	ited Substances (29 CF	R 1910.1001-1052)		
Not regulated.				
Superfund Amendments and	Reauthorization Act of '	1986 (SARA)		
SARA 302 Extremely haza	ardous substance			
Not listed.				
SARA 311/312 Hazardous chemical	No (Exempt)			
SARA 313 (TRI reporting)				
Chemical name		CAS number	% by wt.	
ISOPROPYL ALCOHO)L	67-63-0	1.08	

Other federal regulations				
Clean Air Act (CAA) Section	on 112 Hazardous Air Pollut	ants (HAPs) List		
Not regulated.				
Clean Air Act (CAA) Section	on 112(r) Accidental Releas	e Prevention (40 CFR 68.130)		
Not regulated.				
Safe Drinking Water Act (SDWA)	Not regulated.			
FEMA Priority Substa	nces Respiratory Health and	d Safety in the Flavor Manufacturing Workplace		
GLYCERIN (CAS 56-81-5)		Other Flavoring Substances with OSHA PEL's		
ISOPROPYL ALCOHOL (CAS 67-63-0)		Low priority		
16. Other information, including date of preparation or last revision				
Issue date	02-10-2021			
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			
	guidance for safe handlin	g, use, processing, storage, transportation, disposal and release and is		
		arranty or quality specification. The information relates only to the specific		
	•	nay not be valid for such material used in combination with any other ss, unless specified in the text.		
Devision information	, ,	antification. Draduct Codes		

Revision information Product and Company Identification: Product Codes