SAFETY DATA SHEET



1. Identification

Product identifier	REDKEN TRIPLE DRY 15 DRY TEXTURE FINISHING SPRAY
Other means of identification SDS number	21-92-0000138
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
Sundan Address.	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	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
Health hazards	Serious eye damage/eye irritation Category	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. 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. If eye irritation persists: Get medical advice/attention.
Storage	Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
HYDROFLUOROCARBON 152A		75-37-6	42
ETHANOL		64-17-5	25.33
BUTANE		106-97-8	23
CALCIUM CARBONATE		1317-65-3	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. If eye irritation persists: Get medical advice/attention.
Ingestion	Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
Most important symptoms/effects, acute and delayed	Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.
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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant 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	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. 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	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect containers from physical damage; do not drag, roll, slide, or drop. When moving containers, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport containers. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage,	Level 2 Aerosol.
including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. 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.

211	OSHA Table	7-1 imite	for Air	Contaminants	(29 CER	1910 1000)
03.		Z-I LIIIIIIS		Containinants	129 UPK	1910.10001

Components	Туре	Value	Form
CALCIUM CARBONATE (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
ETHANOL (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
US. OSHA Table Z-3 (29 CFR 1910).1000)		
Components	Туре	Value	Form
CALCIUM CARBONATE (CAS 1317-65-3)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction
US. ACGIH Threshold Limit Value	S		
Components	Туре	Value	
BUTANE (CAS 106-97-8)	STEL	1000 ppm	
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	Form
BUTANE (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	

Components	Туре	Value	Form
CALCIUM CARBONATE (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
· · ·		10 mg/m3	Total
ETHANOL (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
US. Workplace Environmen	tal Exposure Level (WEEL) Guides		
Components	Туре	Value	
HYDROFLUOROCARBON 152A (CAS 75-37-6)	TWA	2700 mg/m3	
		1000 ppm	
logical limit values	No biological exposure limits noted fo	r the ingredient(s).	
propriate engineering trols	Good general ventilation should be us applicable, use process enclosures, lo maintain airborne levels below recom established, maintain airborne levels	ocal exhaust ventilation, or oth mended exposure limits. If exp	er engineering controls to posure limits have not been
ividual protection measures,	such as personal protective equipme	ent	
Eye/face protection	Applicable for industrial settings only.	Wear safety glasses with side	e shields (or goggles).
Skin protection Hand protection	Applicable for industrial settings only.	Wear appropriate chemical re	sistant gloves.
Other	Applicable for industrial settings only.	Wear appropriate chemical re	sistant clothing.
Respiratory protection	Applicable for industrial settings only. filter / organic vapor cartridge or an ai		eded use NIOSH mechanica
Thermal hazards	Wear appropriate thermal protective of	lothing, when necessary.	
neral hygiene siderations	When using do not smoke. Always ob after handling the material and before clothing and protective equipment to r	eating, drinking, and/or smok	

9. Physical and chemical properties

-	-
Appearance	
Physical state	Liquid.
Form	Aerosol.
Color	Not available.
Odor	Characteristic.
Odor threshold	Not available.
рН	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 95 °F (> 35 °C) (liquid)
Flash point	59.0 °F (15.0 °C) Closed Cup (liquid)
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	0.915 - 0.925 g/cm³ (liquid)
Explosive properties	Not explosive.
Heat of combustion (NFPA 30B)	20.2 kJ/g
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	Acids. Strong oxidizing agents. Chlorine. Fluorine. Nitrates.

Hazardous decomposition No hazardous decomposition products are known.

11. Toxicological information

products

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 irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Information on toxicological effects

Acute toxicity	Not known.	
Components	Species	Test Results
BUTANE (CAS 106-97-8)		
Acute		
Inhalation		
Gas		
LC50	Mouse	1237 mg/l, 2 Hours
ETHANOL (CAS 64-17-5)		
Acute		
Dermal		
LD50	Rabbit	> 20000 mg/kg
Inhalation		
Vapor		
LC50	Rat	124.7 mg/l, 4 h OECD 403
Oral		
LD50	Rat	10470 mg/kg OECD 401

Components	Species	Test Results	
HYDROFLUOROCARBON 15	52A (CAS 75-37-6)		
<u>Acute</u>			
Inhalation			
Gas			
ALC	Rat	> 437500 ppm, 4 h	
LC50	-	369000 ppm, 2 Hours	
Skin corrosion/irritation	Due to partial or complete l skin contact are expected.	lack of data the classification is not possible. No adverse effects due to	
Irritation Corrosion	- Skin		
ETHANOL		OECD 404 Result: Not Irritating Species: Rabbit	
BUTANE HYDROFLUOR(OCARBON 152A	Result: Contact with liquid form may cause frostbite. Result: Contact with liquid form may cause frostbite.	
Serious eye damage/eye irritation	Causes serious eye irritatio		
Irritation Corrosion	- Eye		
ETHANOL		OECD 405	
		Result: Irritating Species: Rabbit	
BUTANE		Result: Contact with liquid form may cause frostbite.	
-	OCARBON 152A	Result: Contact with liquid form may cause frostbite.	
Respiratory or skin sensitiza	ation		
Respiratory sensitizatio	Due to partial or complete lack of data the classification is not possible.		
Skin sensitization		Due to partial or complete lack of data the classification is not possible.	
Skin sensitization		· ·	
ETHANOL		OECD 406 Result: Not Sensitizing Species: Guinea pig	
Germ cell mutagenicity	Due to partial or complete l	ack of data the classification is not possible.	
Mutagenicity			
BUTANE		Result: In vitro and in vivo tests did not show mutagenic effects.	
ETHANOL		Result: In vitro and in vivo tests did not show mutagenic effects.	
HYDROFLUOROCARBON 152A		Result: In vitro and in vivo tests did not show mutagenic effects.	
Carcinogenicity	Not classifiable as to carcir classification is not possible	nogenicity to humans. Due to partial or complete lack of data the e.	
IARC Monographs. Ove	rall Evaluation of Carcinogenic	ity	
Not listed.			
OSHA Specifically Regu	lated Substances (29 CFR 1910	0.1001-1052)	
Not regulated.			
US. National Toxicology Not listed.	/ Program (NTP) Report on Car	cinogens	
Reproductive toxicity	Possible reproductive haza	ırd	
	•	nd.	
Developmental effe ETHANOL		> 20000 ppm OECD 414, No effects on development Result: NOAEL Species: Rat	
BUTANE		19678 mg/m ³ OECD 422 Result: NOAEC Species: Rat	
HYDROFLUOROCARBON 152A		50000 ppm OECD 414 Result: NOAEC Species: Rat	

Reproductivity ETHANOL		20700 mg/kg bw/d OECD 416, No effects on fertility Result: NOAEL Species: Rat
HYDROFLUOROCARBON 152A		25000 ppm Result: NOAEL Species: Rat
BUTANE		7131 mg/m ³ OECD 422 Result: NOAEC 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 - repeated exposure	Due to partial or complete lack	of data the classification is not possible.
ETHANOL		1730 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat
HYDROFLUOROCARBON 152A		25000 ppm OECD 453, Inhalation Result: NOAEC Species: Rat Test Duration: 104 wk
BUTANE		7214 mg/m ³ OECD 422 Result: NOAEC Species: Rat Test Duration: 28 d
Aspiration hazard	Due to partial or complete lack	of data the classification is not possible.
Further information	The reference to any animal te based on public, third-party da	sting for individual constituents mentioned in this document i ta.

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
ETHANOL (CAS 64-17	-5)		
Aquatic			
Acute			
Algae	EC50	Pseudokirchneriella subcapitata	22200 mg/l, 96 h
Crustacea	EC50	Ceriodaphnia dubia	5012 mg/l, 48 h
Fish	LC50	Pimephales promelas	15300 mg/l, 96 h
Other	IC50	Activated sludge of a predominantly domestic sewage	> 1000 mg/l, 3 h
Chronic			
Crustacea	NOEC	Daphnia magna	9.6 mg/l, 9 d
Fish	NOEC	Danio rerio	250 mg/l, 120 h OECD 212
HYDROFLUOROCARE	BON 152A (CAS 7	5-37-6)	
Aquatic			
Acute			
Algae	EC50	Algae	47.755 mg/I QSAR
Crustacea	EC50	Daphnia	146.695 mg/l QSAR
Fish	LC50	Fish	295.783 mg/l QSAR
sistence and degradat	oility		
Biodegradability Percent degradat	ion (Aerobic biod	egradation)	
BUTANE	-	100 %	
		Result: Readily Biodeg Test Duration: 385.5 F	
ETHANOL		84 %	louis
		Result: Readily Biodec	gradable
		Test Duration: 20 d	

is

Bioaccumulative potential

Partition coefficient n-octand	bl / water (log Kow)
BUTANE	2.89
ETHANOL	-0.31
HYDROFLUOROCARBON 15	2A 0.75
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. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	This product is ignitable (D001) RCRA hazardous wastes when intended for disposal.
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. Do not re-use empty containers.

14. Transport information

DOT

DOT	
FINISHED GOODS	
UN number	UN1950
UN proper shipping name	AEROSOLS, FLAMMABLE, Limited Quantity
Class	2.1
Packing group	Not applicable.
Transport hazard class(es)	
Label(s)	Limited Quantity
Packaging exceptions	306
LTD QTY Net Inner Capacity	1.0 L
BULK	
UN number	UN1170
UN proper shipping name	ETHANOL SOLUTION
Class	3
Packing group	II
Transport hazard class(es)	
Label(s)	3
Special provisions	24, IB2, T4, TP1
Packaging non bulk	202
ΙΑΤΑ	
FINISHED GOODS	
UN number	ID8000
UN proper shipping name	CONSUMER COMMODITY
Class	9 - Class 9
Packing group	Not applicable.
ERG Number	9L
BULK	
UN number	UN1170
UN proper shipping name Class	ETHANOL SOLUTION 3
Packing group	5
ERG Number	3L
IMDG	3E
FINISHED GOODS	
	UN1950
UN number UN proper shipping name	AEROSOLS, FLAMMABLE, Limited Quantity
Class	2.1
VIAIERIAI NAME: REDKEN TRIPLE DRY	15 DRY TEXTURE FINISHING SPRAY

Packing group Environmental Hazards	Not applicable.	
Marine pollutant Transport hazard class(es)	No.	
Label(s)	Limited Quantity	
EmS	F-D, S-U	
LTD QTY Net Inner Capacity BULK	1.0 L	
UN number	UN1170	
UN proper shipping name	ETHANOL SOLUTION	
Class	3	
Packing group	II	
Environmental hazards		
Marine pollutant	No.	
EmS	F-E, S-D	
General information	Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.	
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 A	ct (TSCA)	
TSCA Section 12(b) Exp	ort Notification (40 CFR 707, Subpt. D)	
Not regulated.		
CERCLA Hazardous Substar	nce List (40 CFR 302.4)	
BUTANE (CAS 106-97-8)	Listed.	
ETHANOL (CAS 64-17-5)	Listed.	
SARA 304 Emergency releas	e notification	
	d Substances (29 CFR 1910.1001-1052)	
Not regulated.		
Superfund Amendments and Rea SARA 302 Extremely hazard		
Not listed.		
SARA 311/312 Hazardous chemical	No (Exempt)	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
-	112 Hazardous Air Pollutants (HAPs) List	
Not regulated.		
	112(r) Accidental Release Prevention (40 CFR 68.130)	
BUTANE (CAS 106-97-8) HYDROFLUOROCARBO	N 1524 (CAS 75 37 6)	
Safe Drinking Water Act (SDWA)	Not regulated.	
	es Respiratory Health and Safety in the Flavor Manufacturing Workplace	
ETHANOL (CAS 64-1		
ETHANOL (CAS 64-1		
ETHANOL (CAS 64-1	I7-5) Low priority uding date of preparation or last revision	
ETHANOL (CAS 64-1	(7-5) Low priority	

Disclaimer

Health: 2 Flammability: 4 Instability: 0

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.