

SAFETY DATA SHEET

ISSUANCE DATE: December 8, 2015

SDS # 30-12-001-0

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

L'Oreal USA Products, Inc.
111 Terminal Avenue
Clark, NJ 07066

L'Oreal Canada
4895 rue Hickmore
Ville St-Laurent, H4Y 1K5
Canada

Emergency Telephone Number:

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 Number: 412-390-3326

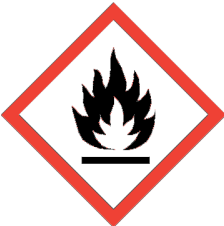

Product Name: Redken NY Volume Backbar Treatment

Recommendations on use: Personal care product used on the hair for conditioning/cosmetic effect.

Restrictions on use: Avoid fire, flame, heat and other sources of ignition. For external use only. Keep away from contact with eyes. Use only as directed. Liquid dispensed from the container is considered flammable until dry.

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: WARNING

Symbol	Classification	Hazard Statement	Prevention Statements
	Flammable Liquids Category 3	Flammable liquid and vapor	<ul style="list-style-type: none"> • Keep away from heat, sparks, open flames and hot surfaces. No smoking. • Keep container tightly closed. • Ground/bond container and receiving equipment. • Use explosion-proof electrical, ventilating, lighting, manufacturing and packaging equipment. • Use only non-sparking tools. • Take precautionary measures against static discharge. • Wear nitrile or vinyl protective gloves.
	Eye Irritation Category 2A	Causes serious eye irritation	<ul style="list-style-type: none"> • Wash hands thoroughly after handling. • Wear eye protection appropriate for the manufacturing operation being performed (goggles or face shield).

This material is considered hazardous by the US Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200)

General Precautionary Statements: Keep out of reach of children. Read label before use.

Hazards Not Otherwise Classified: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Only hazardous constituents associated with the product are listed below

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Aminopropyl Triethoxysilane	919-30-2	≤ 10.0%
Lactic Acid	50-21-5	≤ 2.6%

SECTION 4: FIRST AID MEASURES

Response Statements:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing until material is sufficiently removed from the eye. **If eye irritation persists:** Get medical advice/attention.

IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. **If skin irritation occurs:** Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing. Call a Poison Control Center if you feel unwell.

IF SWALLOWED: Do not induce vomiting. Never give anything by mouth to an unconscious individual. Consult a physician or Poison Control Center immediately.

SYMPTOMS/EFFECTS: Causes serious eye irritation.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Consult product labeling. No special advice.

SECTION 5: FIRE-FIGHTING MEASURES

Notes for Non-Emergency Personnel:

EXTINGUISHING MEDIA: In case of fire: Use carbon dioxide, dry chemical and/or foam to extinguish. Water spray may be used to soak other materials surrounding the product, to prevent the spread of the fire. Selection of a fire extinguisher should also be appropriate to address the location of the fire and equipment involved. Please review the tools available at your location to ensure proper availability of equipment.

Notes for those trained to participate in an emergency:

SPECIAL FIRE FIGHTING PROCEDURES: Treat as a flammable liquid. Follow National Fire Protection Association Guidelines or local guidelines appropriate for emergency response. Minimize all sources of static electricity.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Observe all appropriate precautions for handling flammable materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Notes for non-emergency personnel:

Consult trained response personnel for clean-up of large spills or locations where providing preliminary control of the chemical release is hazardous. Hazardous locations include areas where ignition sources cannot be controlled. Isolate the area and deny entry to unnecessary and unprotected personnel. Sections 2, 5, 7 and 8 of this document should be consulted upon use of material, to become knowledgeable of the material's hazards and how to control risks associated with handling flammable liquids.

If the location is not hazardous and only a small amount of material is released, control the spill using absorbent pads while wearing the protective equipment as noted below. Clean the area with detergent and water. Prohibit discharge to drains, soil, surface and ground waters. Dispose in accordance with Section 13 of this document.

PERSONAL PROTECTIVE EQUIPMENT: Nitrile or vinyl gloves, safety glasses/goggles, protective clothing (e.g. apron) may be required for clean-up of large spills. Respiratory protection is typically not necessary, but may be used depending upon the size of the spill and occupational exposure limits. Respiratory protection may include the use of organic vapor cartridges. Refer to Section 8 for additional information.

Notes for those trained to participate in an emergency:

ACCIDENTAL RELEASE MEASURES: Eliminate all sources of ignition. Dike and contain the free liquid and absorb on vermiculite or spill pillows/pads. Place spent absorbents in UN specification drums for disposal. All precautions associated with controlling a flammable liquid should be employed during clean-up. Wash area completely with water. Take care to avoid contact with wet surfaces or walkways that may become slick when residue is present. Prohibit discharge to drains, soil, surface and ground waters.

Recommendations for personal protective equipment selection are noted above. Non-sparking tools should be utilized in all clean-up associated with flammable liquids. Dispose in accordance with section 13 of this document.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Do not eat, drink or smoke while working with hazardous materials. Employees should be advised to wear appropriate protective equipment in the manufacturing environment. See section 8 of this document for protective equipment selection. Do not expose to heat or flame. All manufacturing should be performed indoors, in an enclosed environment free from uncontrolled ignition sources. Employees should be advised not to handle flammable products in close proximity to incompatible materials. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.

Maintain a clean work environment which includes use of properly functioning containers, proper housekeeping practices.

CONDITIONS FOR SAFE STORAGE:

Storage precautions for unpackaged product (manufacturing environment): Store in a well-ventilated place and keep cool. Keep containers closed when not in use. Minimize inventory. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Appropriate fire suppression and detection equipment should be utilized. Store on spill pallets or other locations where spill containment will be easily accessible.

Storage precautions for packaged product: See consumer packaging.

Keep away from open drains and access to the environment.

Incompatible materials: Oxidizers, acids, bases. Store away from incompatible materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS: These criteria have been published by the referenced authority to establish exposure limits in the work environment. Employee work areas should be monitored to ensure that permissible limits are not exceeded during the work day. These references do not coincide with product use. These references are meant to be in association with the manufacturing environment.

OCCUPATIONAL EXPOSURE VALUES:

Component Name (CAS-No.)	Reference	TWA		STEL/CEILING	
		ppm	mg/m ³	ppm	mg/m ³
No OEVs have been established for noted constituents.	OSHA PEL	--	--	--	--
	ACGIH TLV	--	--	--	--
	NIOSH REL	--	--	--	--

No occupational exposure values have been published for other constituents noted in Section 3.

WORK HYGIENIC PRACTICES: Ensure all work surfaces are maintained, to prevent contamination.

ENGINEERING CONTROLS: None required for product use. For handling large quantities of material, such as in the manufacturing of product, ventilation should be utilized. This ventilation should be compatible with the control of flammable materials. Exhaust ventilation should be utilized to maintain air concentrations of material below the occupational exposure guidelines noted above.

Local exhaust ventilation is not typically required for product use. For handling large quantities of material, such as in the manufacturing of product -- Local Exhaust: Explosion proof. Mechanical (general): Explosion proof.

PERSONAL PROTECTIVE EQUIPMENT: Consistent with good hygiene practices, personal protective equipment (PPE) should be used in conjunction with other control measures including engineering controls, ventilation and isolation. See also Section 5 of this document for PPE advice, in the event of an emergency.

Eye/Face Protection (Non-Emergency): None required for product use. For handling of large quantities of liquid material, safety glasses with side shields/goggles are recommended.

Skin Protection (Non-Emergency): None required for product use. For handling large quantities of material, such as in product manufacturing, nitrile or vinyl gloves should be considered for use. Tyvek clothing may also be suitable for handling large quantities of material in the manufacturing environment.

Respiratory Protection (Non-Emergency): Respiratory protection is not required for product use. For manufacturing of product, respiratory protection may be considered. Ensure that the respirator meets current local occupational health and safety standards. Organic vapor cartridges should be utilized with filtering respiratory protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid – Yellow

ODOR: Characteristic

ODOR THRESHOLD: Not Available

pH: 9.2 – 9.8

MELTING/FREEZING POINT: F: Not Available C: Not Available

BOILING POINT:	F: Not Available	C: Not Available
FLASH POINT:	F: 136.4	C: 58 METHOD USED: Closed cup
EVAPORATION RATE:	Not Available (Butyl acetate = 1)	
FLAMMABILITY:	Not Applicable to Liquids	
FLAMMABLE LIMITS IN AIR:	Not Available	
VAPOR PRESSURE (mmHg):	@ 70F: Not Available	@ 21 C: Not Available
VAPOR DENSITY (AIR = 1):	@ 70F: Not Available	@ 21 C: Not Available
RELATIVE DENSITY (H2O = 1):	1.01	
SOLUBILITY IN WATER:	Not Available	
PARTITION COEFFICIENT:	Not Available	
AUTOIGNITION TEMPERATURE:	Not Available	
DECOMPOSITION TEMPERATURE:	Not Available	
VISCOSITY:	Not Available	

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Material is not considered reactive under typical handling and storage conditions.

STABILITY: Product is stable.

POSSIBILITY OF HAZARDOUS REACTIONS: None known. Hazardous polymerization is not expected to occur.

CONDITIONS TO AVOID: Heat, fire, flame and other sources of ignition.

INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizers, acids, and bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal degradation may produce oxides of carbon, hydrocarbons, and/or derivatives. Aminopropyl Triethoxysilane rapidly hydrolyzes to ethyl alcohol & silanetriol in the final product.

SECTION 11: TOXICOLOGICAL INFORMATION

Where information is not listed specifically for constituents, published information was not available.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS:

SKIN CORROSION/IRRITATION: None expected

SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye irritation.

RESPIRATORY/SKIN SENSITIZATION: None expected

INGESTION: Harmful if swallowed

INHALATION: None expected

ROUTES OF EXPOSURE: Inhalation, eyes, skin, ingestion

SYMPTOMS: Causes serious eye irritation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

ACUTE TOXICOLOGY DATA FOR COMPONENTS

Where information is not listed specifically for constituents, published information was not available.

Note: Aminopropyl Triethoxysilane (APTES) is hydrolytically unstable and hydrolyses to produce ethyl alcohol and silanetriol. The remaining hazards are those associated with the hydrolysis products and not the unreacted compound.

Material	Route	Species	Test Results
Aminopropyl Triethoxysilane	Oral LD ₅₀	Rat (EPA OTS 798.1175)	1,570 mg/kg bw
Aminopropyl Triethoxysilane	Dermal LD ₅₀	Rabbit (EPA OTS 798.1100)	4,290 mg/kg bw
Aminopropyl Triethoxysilane	LC ₅₀ (4 hr)	Rat (OECD 403)	> 7.35 mg/L air
Lactic Acid	Oral LD ₅₀	Rat – F (OECD 401 eq.)	3,543 mg/kg bw
Lactic Acid	Dermal LD ₅₀	Rabbit (OECD 402 eq.)	> 2,000 mg/kg bw
Lactic Acid	LC ₅₀ (4 hr)	Rat (OECD 403)	> 7.94 mg/L air

Skin Corrosion/Irritation:

Aminopropyl Triethoxysilane: Corrosive (Rabbit, OECD 404)
Lactic Acid: Severely Irritating (Rabbit, OECD 404)

Serious Eye Damage/Irritation:

Aminopropyl Triethoxysilane: Corrosive (Rabbit, OECD 405)
Lactic Acid: Corrosive (In Vitro, CEET)

Respiratory Irritation:

No Data

Skin Sensitization:

Aminopropyl Triethoxysilane: Sensitizing (Guinea Pig, OECD 406) (Hydrolysis products – Not sensitizing)
Lactic Acid: Not Sensitizing (Guinea Pig, OECD 406 eq.)

CHRONIC HEALTH HAZARDS:

REPEAT DOSE TOXICITY:

NOAEL (Aminopropyl Triethoxysilane, oral): 200mg/kg bw/d (90d)(Rat, OECD 408)
 LOAEL (Lactic Acid, dermal): 886 mg/kg bw/d (90d) (Rat) – No adverse effects

CARCINOGENICITY:

Component Name (CAS-No.)	OSHA	ACGIH	NTP	IARC
None established	--	--	--	---

Notes:

ACGIH TLV-A3 – Confirmed Animal Carcinogen with Unknown Relevance to Humans

MUTAGENICITY:

Aminopropyl Triethoxysilane: A variety of *in vitro* and *in vivo* tests have produced negative results.
Lactic Acid: A variety of *in vitro* tests have produced negative results.

REPRODUCTIVE TOXICITY:

Aminopropyl Triethoxysilane: NOAEL: 600 mg/kg bw/d (Rat, OECD 408) – No effects on fertility

DEVELOPMENTAL TOXICITY/TERATOGENICITY:

Aminopropyl Triethoxysilane: NOAEL: 100 mg/kg bw/d (Rat, EPA OTS 798.4900)

SECTION 12: ECOLOGICAL INFORMATION

Contact with the environment should be avoided. Spills and leaks should be immediately cleaned up and removed. All precautions should be taken to prevent contact with the environment. Published information regarding ingredients listed on this document area found below; where data is not listed, documentation was unavailable.

ACUTE AND PROLONGED TOXICITY TO FISH

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Aminopropyl Triethoxysilane	LC ₅₀ (OECD 203)	> 934 mg/L	Danio rerio	96 h
Lactic Acid	LC ₅₀ (OECD 203)	320 mg/L	Danio rerio	96 h

ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Aminopropyl Triethoxysilane	EC ₅₀ (OECD 202)	331 mg/L	Daphnia magna	48 h
Lactic Acid	EC ₅₀ (OECD 202)	130 mg/L	Daphnia magna	48 h

TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Aminopropyl Triethoxysilane	EC ₅₀ (EU Met.C.3)	>1,000 mg/L	Desmodesmus subspicatus	72 h
Lactic Acid	EC ₅₀ (OECD 201)	3,500 mg/L	Pseudokirchneriella subcapitata	72 h

TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Aminopropyl Triethoxysilane	EC ₅₀	> 1,000 mg/L	Pseudomonas putida	5.75 h
Lactic Acid	EC ₅₀ (OECD 209)	> 100 mg/L	Activated sludge	3 h

PERSISTENCY AND DEGRADABILITY:

Aminopropyl Triethoxysilane: Not Readily Biodegradable – EU Method C.4-A – 67% (28d)
Rapidly hydrolyzes to ethyl alcohol & silanetriol
Lactic Acid: Readily Biodegradable – EU Method C.6 – 67% (20d)

BIOACCUMULATIVE POTENTIAL:

Aminopropyl Triethoxysilane: BCF: 3.4 OECD 305 C – Not likely to bioaccumulate.
Lactic Acid: log Pow: -0.62 (OECD 117) – Not likely to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Those responsible for the performance of disposal, recycling or reclamation activities should refer to section 8 of this document for advice on personal protective equipment and exposure controls.

WASTE DISPOSAL CONTAINERS: Appropriate US DOT containers should be utilized which may include cardboard boxes for products, metal or plastic drums for liquids. These containers should meet the packaging specifications required for DOT compliance.

WASTE DISPOSAL METHOD: This product is ignitable (D001) RCRA hazardous wastes when intended for disposal. Controlled incineration at a hazardous waste facility is the recommended technology for treatment and disposal. This material must not be disposed through sewage.

RCRA HAZARD CLASS: D001

Follow all local governmental requirements intended for disposal.

SECTION 14: TRANSPORT INFORMATION

North American Ground Transportation

- **IN CONSUMER PACKAGING:** Limited Quantity/Consumer Commodity (≤ 5 L)
UN ID Number: UN 1266
Proper Shipping Name: Perfumery products
Hazard Class: 3
Packing Group: III
Label Statements: Exempt – Limited Quantity Marking Only

- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 1266
Proper Shipping Name: Perfumery products
Hazard Class: 3
Packing Group: III
Label Statements: Flammable Liquid (Class 3)

Transport Via Water

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 5 L)
UN ID Number: UN 1266
Proper Shipping Name: Perfumery products
Hazard Class: 3
Packing Group: III
Label Statements: Exempt – Limited Quantity Marking Only

- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 1266
Proper Shipping Name: Perfumery products
Hazard Class: 3
Packing Group: III
Label Statements: Flammable Liquid (Class 3)

Transport Via Air (Domestic/International)

- **IN CONSUMER PACKAGING:** Limited Quantity – ID 8000, Consumer Commodity (≤ 0.5 L)
UN ID Number: ID 8000
Proper Shipping Name: Consumer Commodity
Hazard Class: 9
Packing Group: N/A
Label Statements: Miscellaneous – Dangerous Goods & Limited Quantity Marking

- **OTHER THAN CONSUMER PACKAGING:**
UN ID Number: UN 1266
Proper Shipping Name: Perfumery products
Hazard Class: 3
Packing Group: III
Label Statements: Flammable Liquid (Class 3)

Please be aware of carrier transport variations before shipping hazardous materials.

SECTION 15: REGULATORY INFORMATION

National Fire Protection Association Codes: Health: 2 Fire: 2 Reactivity: 0 Other: None

Workplace Hazardous Materials Identification System: Class B, Division 2 – Flammable Material; Class D; Division 2, Subdivision B; Irritation

This regulatory information represents the product, in its consumer packaging.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: This is the first issuance of this document.

Author: Ronald Weslosky (Corporate Regulatory Services)