

MATERIAL SAFETY DATA SHEET
MSDS DATE: May 12, 2011

MSDS # 11-069

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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

Emergency Telephone Number:
800-535-5053 (International: 352-323-3500)

For further information:
732-499-2741

Product Name: Sunscreens NFPA Level 2 Aerosols

This document is written for the packaged product (aerosol can containing propellants) with references to the dispensed or unpackaged product (liquid) to identify hazards as necessary.

Recommendations on use: Aerosol-packaged liquid for personal sun protection.

Restrictions on use: Please read the labeling of the consumer package for associated sun protection level. For external use only. Use only as directed.

SECTION 2: HAZARDS IDENTIFICATION

Signal word: WARNING



Hazard statements: Flammable spray aerosol. Eye irritant.

Regulatory Classification: OSHA flammable aerosol, eye irritant; DOT 2.1 flammable aerosol; WHMIS Division 5 of Class B Flammable Aerosol ; NFPA Level 2 aerosol

Precautionary statements:

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

Prevention Statements for flammable spray aerosols:

Keep away from heat, sparks, open flames and hot surfaces. Do not use while smoking. Do not spray on an open flame or other ignition source. Do not store at temperatures above 50C/122F. Liquid dispensed from the container is flammable until dry.

Pressurized container: Do not pierce or burn, even after use.

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Prevention statements for eye irritants: Wash hands thoroughly after handling. Do not eat, drink or smoke while using this product. Avoid spraying into eyes.

Other hazards which will not result in classification: Over-exposure may cause skin irritation. Ingestion may produce signs of alcohol intoxication. The product is a flammable liquid before packaging into an aerosol can. Liquid should be treated as flammable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Bag-on-valve aerosol can. The can is pressurized with nitrogen. Flammable propellants are not present. Propellant is not dispensed from can during use of the product.

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Ethyl Alcohol	64-17-5	5—70%
Homosalate	118-56-9	<15%
Octocrylene	6197-30-4	<10%
Oxybenzone	131-57-7	<6%
Octisalate	118-60-5	<5%
Avobenzone	70356-09-1	<3%
Nitrogen	7727-37-9	Not an ingredient of the product. Material comprises approximately 40% of the total can volume.

SECTION 4: FIRST AID MEASURES

Response Precautionary Statements:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing for at least 20 minutes or until material is sufficiently removed from the eye. **If eye irritation persists:** Get medical advice/attention if irritation or other symptoms occur.

IF ON SKIN OR HAIR (AEROSOL PRODUCT): Wash off with water and soap. If irritation symptoms persist, get medical attention.

IF ON SKIN OR HAIR (FLAMMABLE LIQUID BEFORE PACKAGING – MANUFACTURING): Remove immediately all contaminated clothing. Rinse skin with water in an appropriate emergency shower. If irritation symptoms appear and persist, get medical attention.

IF SWALLOWED: Do not induce vomiting. Consult a physician immediately. If symptoms of alcohol intoxication appear, get medical attention immediately.

IF INHALED: Move to fresh air. If irritation symptoms appear and persist, get medical attention.

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

SYMPTOMS/EFFECTS: Eye irritation upon contact, possible skin irritation if over-exposed (manufacturing environment), possible signs of alcohol intoxication if ingested.



SECTION 5: FIRE-FIGHTING MEASURES

Notes for Non-Emergency Personnel:

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, and/or water spray. 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 NFPA Level 2 aerosol. Contents are under pressure. Follow National Fire Protection Association Guidelines.

UNUSUAL FIRE AND EXPLOSION HAZARDS: The product is shipped and stored under pressure. Only the liquid product is flammable. The propellant is not flammable. Observe all appropriate precautions for handling flammable materials for both the packaged and unpackaged product.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide/carbon dioxide.

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 can not be controlled. It is vital that sections 2, 5, 7 and 8 of this document be consulted before an accident occurs, to control any risks in handling flammable aerosols and liquids.

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

PERSONAL PROTECTIVE EQUIPMENT: Plastic or rubber gloves, apron may be required for clean-up of large spills. Respiratory protection may need to be utilized, depending upon the size of the spill. Protective goggles or face shield is recommended for the control of liquid.

Notes for those trained to participate in an emergency:

ACCIDENTAL RELEASE MEASURES: Since this product is a sealed aerosol, accidental discharge of contents is unlikely unless the can is punctured. Should can puncture occur, eliminate all sources of ignition. Dike and contain the free liquid and absorb on vermiculite or spill pillows. Place spent absorbents in UN specification drums for disposal. The product is alcohol-based. All precautions associated with controlling a flammable liquid should be employed during clean-up. 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

Storage precautionary statements for flammable aerosols: Protect from sunlight. Do not expose to temperatures exceeding 50 C/122 F. Use of an enclosed storage area with easy access is recommended for aerosol containers. Appropriate fire suppression and detection equipment should be utilized. Store away from areas where ignition sources could be present. All aerosols should be stored in an upright position.

Keep away from open drains and access to the environment.



Storage precautions for unpackaged product (manufacturing environment): Store bulk quantities in a cool, well-ventilated room. Keep cool. Minimize inventory. Keep container tightly closed. 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.

Keep away from open drains and access to the environment.

General notes on storage:

Incompatible materials: Oxidizers. Store away from incompatible materials.

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

General notes on handling:

Aerosols should be handled in a manner that minimizes the risk of puncture – caps should be replaced after use. Containers should be held in an upright position during use.

Employees should not eat, drink or smoke while working with flammable materials. Employees should be advised to wear appropriate protective equipment in the manufacturing environment. See section 8 of this document for protective equipment selection. 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.

Please refer to section 8 of this document for recommended equipment to be used in a manufacturing environment.

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:

OSHA PEL-TWA:	1000 ppm Ethyl Alcohol
OSHA PEL-STEL/CEILING:	None established
ACGIH TLV-TWA:	None established
ACGIH TLV STEL/CEILING:	1000 ppm Ethyl Alcohol

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. Testing of aerosol cans should only be performed with explosion-proof ventilation equipment.

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.

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.



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. For testing of pressurized cans, face shields or other equipment that protects the eyes/face should be considered for use.

SKIN PROTECTION (NON-EMERGENCY): None required for product use. For handling large quantities of material, such as in product manufacturing, plastic or rubber gloves should be considered for use. Tyvek clothing may also be suitable for handling large quantities of material in the manufacturing environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Aerosol can dispensing liquid material which dries soon after contact. The water-thin liquid may be opaque upon dispensation.

ODOR: The product is lightly fragranced and is meant to smell pleasant (floral).

ODOR THRESHOLD: The fragrance of the material will be noticeable when very little product has been dispensed.

pH: 6-7

MELTING POINT: F: N/A C: N/A

FREEZING POINT: F: N/A C: N/A

BOILING POINT: F: N/A C: N/A

FLASH POINT: 54 – 140 F **METHOD USED:** Closed Cup

EVAPORATION RATE: >1 for product (Butyl acetate = 1)

FLAMMABILITY: gas – nitrogen, not flammable

FLAMMABLE LIMITS IN AIR (% BY VOLUME): ETHYL ALCOHOL, UPPER: 19% LOWER: 3.3%;

VAPOR PRESSURE (mmHg): @ 70 F: 2500 -- 5500 @ 21 C: 2500 -- 5500

VAPOR DENSITY (AIR = 1): @ 70 F: >1; @ 21 C: >1

RELATIVE DENSITY/SPECIFIC GRAVITY (H₂O = 1): compressed liquid ~ 1; liquid <1

SOLUBILITY IN WATER: Soluble (as liquid product)

PARTITION COEFFICIENT: n-octanol/water: Not available

AUTOIGNITION TEMPERATURE: F: N/A C: N/A

DECOMPOSITION TEMPERATURE: Not available

VISCOSITY: Not available

SECTION 10: STABILITY AND REACTIVITY

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

STABILITY: Product is stable under standard pressure and temperature.

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): Oxidizing agents and nitric acid.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS:

SKIN CORROSION/IRRITATION: Overexposure may cause skin irritation

SERIOUS EYE DAMAGE OR IRRITATION: Irritation may be associated with this product, if direct contact occurs

RESPIRATORY OR SKIN SENSITIZATION: None expected

INGESTION: Harmful if swallowed. May produce signs of alcohol intoxication

INHALATION: May be irritating if overexposure occurs

CARCINOGENICITY:

OSHA: Not recognized as carcinogenic

NTP: Not recognized as carcinogenic

ACGIH: Not recognized as carcinogenic

IARC: Not recognized as carcinogenic

ROUTES OF EXPOSURE: Inhalation, eyes, skin

SYMPTOMS: May produce signs of alcohol intoxication if ingested. The symptoms may include unsteady gait, nausea, and dizziness. Skin redness/itchiness may occur with over-exposure to the product. Watering, stinging or itching eyes may occur with direct contact.

CHRONIC HEALTH EFFECTS: None anticipated

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

INGREDIENT NAME	TEST	SPECIES	DOSE
Ethyl Alcohol	LD ₅₀ (Oral)	Rat	>6,200 mg/kg
Ethyl Alcohol	LD ₅₀ (Dermal)	Rabbit	>20,000 mg/kg
Ethyl Alcohol	LC ₅₀ (8 hours)	Rat	16,000 mg/l
Homosalate	LD ₅₀ (Dermal)	Rat	>8,000 mg/kg
Homosalate	LD ₅₀ (Oral)	Rabbit	>5,000 mg/kg
Octocrylene	LD ₅₀ (Oral)	Rat	>2,000 mg/kg
Octocrylene	LD ₅₀ (Dermal)	Rat	>2,000 mg/kg
Octinoxate	LD ₅₀ (Oral)	Rat	>5,000 mg/kg
Octinoxate	LD ₅₀ (Dermal)	Rat	>5,000 mg/kg
Oxybenzone	LD ₅₀ (Oral)	Rat	>5,000 mg/kg
Oxybenzone	LD ₅₀ (Dermal)	Rat	>16,000 mg/kg
Octisalate	LD ₅₀ (Oral)	Rat	>5,000 mg/kg
Octisalate	LD ₅₀ (Dermal)	Rat	>5,000 mg/kg
Avobenzene	LD ₅₀ (Oral)	Rat	>16,000 mg/kg
Avobenzene	LD ₅₀ (Dermal)	Rat	>1,000 mg/kg

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.

ACUTE AND PROLONGED TOXICITY TO FISH

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Octocrylene	LC ₅₀ (DIN 38412 Part 15)	>10,000 mg/l	Golden Orfe	96 h
Octinoxate	LC ₅₀ (OECD Guideline 203)	< 604 & >1422 mg/l	Zebra Fish	96 h
Oxybenzone	LC ₅₀ (DIN 38412 Part 15)	100 – 220 mg/l	Golden Orfe	96 h
Octisalate	LC ₅₀ (OECD Guideline 203)	613 mg/l	Zebra Fish	96 h
Avobenzene	LC ₅₀ (OECD Guideline 203)	>100 mg/l	Carp	96h

ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Octocrylene	EC ₅₀ (OECD Guideline 202)	> 100 mg/l	Daphnia Magna	48 h
Octinoxate	EC ₅₀ (OECD Guideline 202)	> 0.0271 mg/l	Daphnia Magna	48 h
Avobenzene	EC ₅₀ (OECD Guideline 202)	> 100 mg/l	Daphnia Magna	48 h

TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Octinoxate	EC ₅₀ (OECD Guideline 201 Static)	> 100 mg/l	Green Algae	72 h
Oxybenzone	EC ₅₀ (87/301/EEC)	1.4 mg/l	Green Algae	72H
Avobenzene	EC ₅₀ (OECD Guideline 201 Static)	> 100 mg/l	Green Algae	72h

TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Octocrylene	EC ₁₀ (OECD Guideline 209)	>1,000 mg/l	Activated Sludge	30 min
Octinoxate	EC ₁₀ (DIN/EN/ISO 8192 – OECD 209-88/302/EEC,P.C)	> 1,000 mg/l	Activated Sludge	30 min
Oxybenzone	EC ₁₀ (EEC L133)	>100 mg/l	Activated Sludge	3 h
Octisalate	EC ₁₀ (OECD Guideline 209)	>10,000 mg/l	Activated Sludge	30 min

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: Nitrogen gas propellant does not release when product is dispensed. However, cans should have caps in place during waste consolidation or dispenser buttons/actuators removed. Appropriate US DOT containers should be utilized which may include cardboard boxes, metal or plastic drums. These containers should meet the packaging specifications required for DOT compliance.

WASTE DISPOSAL METHOD: Alcohol-based aerosol products are ignitable (D001) RCRA hazardous wastes when intended for disposal. Controlled incineration at a hazardous waste facility is the recommended technology for treatment and disposal. Methods for disposal should include control of the pressurized container. 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
- **LIQUID WITHOUT PROPELLANT PACKAGED IN OTHER THAN CONSUMER PACKAGING:**
ID NUMBER: UN 1170
PROPER SHIPPING NAME: Ethyl alcohol, mixture
HAZARD CLASS: 3
PACKING GROUP: II
LABEL STATEMENTS: Flammable Liquid

Transport Via Water

- **In Consumer Packaging:** Limited Quantity
ID NUMBER: UN 1950
PROPER SHIPPING NAME: Aerosols
HAZARD CLASS: 2.1
PACKING GROUP:
LABEL STATEMENTS:
- **LIQUID WITHOUT PROPELLANT PACKAGED IN OTHER THAN CONSUMER PACKAGING:**
ID NUMBER: UN 1170
PROPER SHIPPING NAME: Ethyl alcohol, mixture
HAZARD CLASS: 3
PACKING GROUP: II
LABEL STATEMENTS: Flammable Liquid

Transport Via Air Domestic/International

- **In Consumer Packaging:** Limited Quantity/Consumer Commodity
- **LIQUID WITHOUT PROPELLANT PACKAGED IN OTHER THAN CONSUMER PACKAGING:**
ID NUMBER: UN 1170
PROPER SHIPPING NAME: Ethyl alcohol, mixture
HAZARD CLASS: 3
PACKING GROUP: II
LABEL STATEMENTS: Flammable Liquid

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



SECTION 15: REGULATORY INFORMATION

National Fire Protection Association Codes: Health: 2 Fire: 3 Reactivity: 0 Other: None
Hazardous Materials Identification System: Class B Division 2 Flammable Aerosol
Occupational Safety and Health Administration: Flammable Compressed gas (aerosol)
US DOT/ICAO/IMDG: See section 14 above

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

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: Initial version.

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