L'ORÉAL USA

MATERIAL SAFETY DATA SHEET

MSDS # 99-012

MSDS DATE: October 5, 2007

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: Alcohol-based Aerosols NFPA Level 2

Recommendations on use: Aerosol-packaged liquid for personal care use (hair fixative)

CAUTION: Contents under pressure. Do not store at temperatures above 120F. Do not puncture or incinerate. Avoid fire, flame, heat and other sources of ignition. For external use only. Use only as directed. Keep out of reach of children. Avoid spraying into eyes. Liquid dispensed from the container is flammable until dry.

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

SECTION 2: HAZARDS IDENTIFICATION

Aerosol can filled with alcohol-based product – intended to be used as a spray.

Contents under pressure. Do not store at temperatures above 120 F. Do not puncture or incinerate. Avoid fire, flame and other sources of ignition.

OSHA flammable compressed gas; **DOT** 2.1 flammable aerosol; **WHMIS** Class B Division 2 Aerosol; **NFPA** Level 2 aerosol

Causes eye irritation if product comes in contact with eyes. Over-exposure may cause skin irritation. Ingestion may produce signs of alcohol intoxication.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	CAS NO.	% WT
Ethyl Alcohol	64-17-5	<55
Dimethyl Ether	115-10-6	<30
Isobutane	75-28-5	<30
Butane	106-97-8	<25
Propane	74-98-6	<25
Difluoroethane	75-37-6	<45
Pentane	109-66-0	<10

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush with water for at least fifteen minutes. Get medical attention if irritation or other symptoms occur.

SKIN: Wash off with water and soap.

INGESTION: If swallowed, do not induce vomiting. Consult a physician immediately.

INHALATION: Move to fresh air. If irritation symptoms persist, get medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: No special remarks.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, and/or water spray. However, selection of a fire extinguisher should also be appropriate to address the location of the fire and equipment involved.

SPECIAL FIRE FIGHTING PROCEDURES: Treat as NFPA Level 2 aerosol. Follow National Fire Protection Association Guidelines.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Shipped and stored as liquefied compressed gas under pressure. Both the propellants and the liquid product are extremely flammable as individual components. Accordingly, observe all appropriate precautions for handling flammable materials.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Since this product is a sealed aerosol, accidental discharge of contents is unlikely unless the can is punctured. Should this 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.

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.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Flammable until dry. Do not use or store near heat, fire, flame, and other sources of ignition. Contents under pressure. Do not store at temperatures above 120°F. Do not puncture or incinerate. Avoid spraying in eyes. Store bulk quantities in a cool, well-ventilated room. Limit inventory to the extent possible.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

VENTILATION: 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.

RESPIRATORY PROTECTION: 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 PROTECTION: 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: 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.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None required for product use. Tyvek clothing may also be suitable for handling large quantities of material in the manufacturing environment.

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

Occupational Exposure Values:

OSHA PEL-TWA:	1000 ppm Pentane (all isomers)
ACGIH TLV-TWA:	1000 ppm Butane/Isobutane/Propane (as Aliphatic hydrocarbon gases) 600 ppm Pentane (all isomers) None listed Difluorethane/Dimethyl ether
OSHA PEL/ACGIH TLV STEL:	None Established
OSHA PEL/ACGIH TLV CEILING:	None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Aerosol can dispensing liquid material which dries soon after contact. The water-thin liquid may be slightly colored and/or fragranced.

PHYSICAL STATE: Product dispensed as a liquid spray.

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

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

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

VAPOR PRESSURE (mmHg):
@ 70 F: 2500 -- 5500 **@ 21 C:** 2500 -- 5500
VAPOR DENSITY (AIR = 1):
@ 70 F: >1; **@ 21 C:** >1

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

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

SOLUBILITY IN WATER: Soluble (as liquid product)

FLAMMABLE LIMITS IN AIR (% BY VOLUME): BUTANE, UPPER: 8.4% LOWER: 1.6%; PENTANE, UPPER 7.8% LOWER 1.5%

FLASH POINT: <0 C propellants; <20C (as dispensed, liquid product) **METHOD USED:** Closed Cup

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

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable.

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

INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizing agents and nitric acid.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID (POLYMERIZATION): None known

SECTION 11: TOXICOLOGICAL INFORMATION

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

POTENTIAL HEALTH EFFECTS:

EYES: Irritation
INGESTION: Harmful if swallowed. May produce signs of alcohol intoxication
SKIN: Overexposure may cause skin irritation
INHALATION: May be irritating if overexposure occurs

ACUTE HEALTH HAZARDS:

Causes eye irritation in the event that contact with product occurs. Ingestion of large quantities may produce temporary gastrointestinal disturbance and diarrhea. Ingestion may also produce signs and symptoms of alcohol intoxication. Overexposure may cause skin irritation.

CHRONIC HEALTH HAZARDS:

None anticipated

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

None known.

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.

SECTION 13: DISPOSAL CONSIDERATIONS

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.

RCRA HAZARD CLASS: D001

Follow all local governmental requirements intended for disposal.

SECTION 14: TRANSPORT INFORMATION

North American Ground Transportation

- **In Consumer Packaging:** ORM-D; Consumer Commodity

- **OTHER THAN CONSUMER PACKAGING (liquid without propellant):**
  ID NUMBER: UN 1170
  PROPER SHIPPING NAME: Ethyl alcohol, solution
  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:

- **OTHER THAN CONSUMER PACKAGING (liquid without propellant):**
  ID NUMBER: UN 1170
  PROPER SHIPPING NAME: Ethyl alcohol, solution
  HAZARD CLASS: 3
  PACKING GROUP: II
  LABEL STATEMENTS: Flammable Liquid

Transport Via Air

- **In Consumer Packaging:** Consumer Commodity ID 8000

- **OTHER THAN CONSUMER PACKAGING (liquid without propellant):**
  ID NUMBER: UN 1170
  PROPER SHIPPING NAME: Ethyl alcohol, solution
  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: 4 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

Propellants as well as liquid contents are considered flammable. This regulatory information represents the product, in its consumer packaging.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: This document replaces the version dated December 18, 2003 and all previous versions of material safety data sheets related to this product.

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