

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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

**24 Hour Emergency Telephone Number:**  
1-800-535-5053 (US)  
01-352-323-3500 (Outside US)

**For further information:**  
1-732-499-2741



**Product Name: > 25 Volume Hair Developer and Other Products  
Containing ≥ 8% Hydrogen Peroxide**

**Recommendations on use:** Liquid developer for promoting deposit of hair color.

**Restrictions on use:** Refer to product insert/container for use warnings. For external use only. Use only as directed.

## SECTION 2: HAZARDS IDENTIFICATION

**Signal Word: DANGER**

	Classification	Hazard Statement	Prevention Statements
	Serious Eye Damage – Category 1	Causes serious eye damage	<ul style="list-style-type: none"> <li>Wear eye protection/face protection. Chemical resistant goggles or a face shield is appropriate for the manufacturing environment.</li> <li>Wash hands and face thoroughly after handling.</li> </ul>
	Oxidizing Liquid – Category 3	May intensify fire, oxidizer	<ul style="list-style-type: none"> <li>Keep away from heat.</li> <li>Storage away from combustibles (e.g. paper), organics, and metals (e.g. iron).</li> <li>Take precaution to avoid mixing with combustible and organic materials.</li> <li>Wear protective gloves and eye/face protection when in the manufacturing environment.</li> </ul>

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**General Precautionary Statements:** Keep out of reach of children. Read insert/label before use. Store in a cool place. Avoid contamination of product. Discontinue use if rash, redness, or itching occurs.

**Hazards Not Otherwise Classified:** Harmful if swallowed. Overexposure may cause skin dryness or slight irritation. Prolonged contact may whiten skin. May cause irritation of gastric mucous membranes if swallowed.

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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Only hazardous constituents associated with the product are listed below

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Hydrogen Peroxide	7722-84-1	8% - 12%
White Mineral Oil	8042-47-5	≤ 50%

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### SECTION 4: FIRST AID MEASURES

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#### Response 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:** Immediately call a poison control center or get medical advice/attention.

**IF ON SKIN:** Wash with plenty of water. **If skin irritation occurs:** Get medical attention. Remove contaminated clothing and launder it before reuse.

In cases where discomfort persists and/or medical attention is sought, do not use hair color products again until the specific nature of the skin reaction and the causative agent has been identified by a dermatologist and appropriate medical advice provided.

**IF INHALED:** Remove individual to fresh air and keep in a position comfortable for breathing. Call a Poison Control Center if individual feels unwell.

**IF SWALLOWED:** Do not induce vomiting. Rinse mouth with water then drink plenty of water. Never give anything by mouth to an unconscious individual. Consult a physician or Poison Control Center immediately.

**SYMPTOMS/EFFECTS:** Eye irritation upon contact. Possible skin dryness/irritation if overexposed. Whitening of skin upon prolonged contact.

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

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### SECTION 5: FIRE-FIGHTING MEASURES

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**SUITABLE EXTINGUISHING MEDIA:** Use chemical foam, dry chemical, carbon dioxide (CO<sub>2</sub>), or water spray. Selection of a fire extinguisher should be appropriate to address the location of the fire and other materials involved.

**SPECIFIC FIRE AND EXPLOSION HAZARDS:** Upon decomposition, material yields oxygen and may increase the burning rate of flammable/combustible materials. Extinguish fires with media appropriate for the burning material.

**PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:** Firefighters should wear self-contained breathing apparatus and full protective gear.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal degradation may produce oxides of carbon and/or nitrogen, hydrocarbons and/or derivatives. Decomposition will release oxygen which may intensify fires.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

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**Non-Emergency Personnel Precautions:** Consult trained response personnel for clean-up of large spills or in locations where providing control of the release is hazardous. Isolate the area and deny entry to unnecessary and unprotected personnel. Hazardous locations include areas where ignition sources cannot be controlled. Sections 2, 5, 7, and 8 should be consulted upon use of material, to become knowledgeable of the material's hazards and how to control associated risks.



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If the location is not hazardous and only a small amount of material has been released: Dilute with water, absorb liquid with noncombustible material, and scrub the area with detergent. If potentially combustible materials (e.g. paper towels, sponges, mops) are used, rinse thoroughly prior to disposal or storage. Prohibit discharge to drains, soil, surface and ground waters. Dispose in accordance with Section 13 of this document.

**PERSONAL PROTECTIVE EQUIPMENT:** Plastic or nitrile gloves, safety glasses/goggles, and protective clothing (e.g. apron) may be required for clean-up of large spills. Respiratory protection is typically not necessary, but may be used if occupational exposure limits are expected to be exceeded. Refer to Section 8 for additional information.

**Trained Emergency Personnel Precautions:** Dike and contain any free liquid. Solidify with vermiculite, spill pillows, or other suitable absorbent. Place solidified materials in containers suitable for disposal. Residual product on towels, sponges, or mops may cause spontaneous combustion. Thoroughly rinse potentially combustible material prior to disposal or storage. Prohibit discharge to drains, soil, surface and ground waters. Dispose in accordance with Section 13 of this document.

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## **SECTION 7: HANDLING AND STORAGE**

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**Precautions for safe handling:** Avoid contact with skin, eyes, and clothing. Refer to Section 8 for personal protective equipment selection. Do not eat, drink, or smoke while working with material. Wash hands and face thoroughly after handling. Do not expose to heat and flame. Use only in well ventilated areas. Avoid contamination with combustible organic materials (e.g. oil, sawdust, damp paper towels, etc...), metal, powder or reducing agents. Contamination may cause decomposition, leading to fire. Never return unused material to original container. Empty containers should be rinsed with water before discarding. Use only glass, stainless steel, aluminum, or plastic utensils.

Maintain a safe work environment, including proper housekeeping practices and structurally sound/compatible containers.

**Incompatible Materials:** Combustibles (e.g. wood, paper, oil), organics (e.g. alcohols, glycerols, etc...), metals (e.g. iron, copper, metal alloys), concentrated mineral acids, and reducing agents.

**Conditions for safe storage:** Store in the original tightly capped containers away from sunlight, heat, sparks, and flame. Keep in a cool and well-ventilated area. Keep container closed when not in use. Do not store any tint, lightener lotion or bleach powder after it has been mixed with developer; the container may rupture. Store separately from any combustible materials. Decomposition of hydrogen peroxide may cause increase in pressure and possible container rupture.

Keep away from open drains and protect from releases to the environment.

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## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**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 <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hydrogen Peroxide (7722-84-1)	OSHA PEL	1	1.4	--	--
	ACGIH TLV	1	1.4	--	--
	NIOSH REL	1	1.4	--	--
Mineral Oil (Highly Refined)	ACGIH TLV	--	5 (Inhalable)	--	--
Oil Mist, Mineral (8012-95-1)	OSHA PEL	--	5	--	--
	NIOSH REL	--	5	--	10

**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 oxidizing materials. Exhaust ventilation should be utilized to maintain air concentrations of material below the occupational exposure guidelines noted above.

**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 large quantities of 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, butyl rubber, nitrile rubber, or viton 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.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** Clear to white water-thin liquid or viscous creamy emulsion.

**ODOR:** Material has faint fragranced odor.

**ODOR THRESHOLD:** Not Available

**pH:** 2.0 – 4.3

**MELTING/FREEZING POINT:** F: ~32 C: ~0

**BOILING POINT:** F: ~212 C: ~100

**FLASH POINT:** F: >200 C: >93.4 **METHOD USED:** Not Applicable

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

**FLAMMABILITY:** Not Applicable

**FLAMMABLE LIMITS IN AIR:** Not Available

**VAPOR PRESSURE (mmHg):** @ 86 F; 30 C: ~31

**VAPOR DENSITY (AIR = 1):** Not Available

**RELATIVE DENSITY (H<sub>2</sub>O = 1):** ≥ 0.93

**SOLUBILITY IN WATER:** Miscible

**PARTITION COEFFICIENT:** log P<sub>ow</sub>: -1.1 (20% H<sub>2</sub>O<sub>2</sub> Solution)

**AUTOIGNITION TEMPERATURE:** Not Available

**DECOMPOSITION TEMPERATURE:** Not Available

**VISCOSITY:** Not Available (free flowing to creamy emulsion)

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## SECTION 10: STABILITY AND REACTIVITY

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**REACTIVITY:** Contained material may show increases in pressure upon exposure to radiant heat (sunlight) or sources of ignition.

**STABILITY:** Product is stable under standard pressure and temperature.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Contact with combustible materials may lead to spontaneous combustion. Hazardous polymerization is not expected to occur.

**CONDITIONS TO AVOID:** Heat and sunlight. Contamination.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Combustibles (e.g. wood, paper, oil), organics (e.g. alcohols, glycerols, etc...), metals (e.g. iron, copper, metal alloys), concentrated mineral acids, and reducing agents. Do not use metallic bowls and stirrers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal degradation may produce oxides of carbon and/or nitrogen, hydrocarbons and/or derivatives. Decomposition will release oxygen which may intensify fires.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### POTENTIAL HEALTH EFFECTS:

#### ACUTE HEALTH EFFECTS:

**SKIN CORROSION/IRRITATION:** Overexposure may cause skin irritation or dryness

**SERIOUS EYE DAMAGE/IRRITATION:** Causes eye damage

**RESPIRATORY/SKIN SENSITIZATION:** None expected

**INGESTION:** Harmful if swallowed. May cause irritation of gastric mucous membranes if swallowed.

**INHALATION:** May cause mild transient respiratory irritation

**ROUTES OF EXPOSURE:** Eyes, skin, inhalation, ingestion

**SYMPTOMS:** Symptoms may include watering, stinging, and redness of eye or blurry vision with direct contact. Prolonged contact may cause temporary whitening of the skin; redness and blisters may develop if skin is not washed promptly.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Pre-existing dermatitis may be made worse by exposure.

### ACUTE TOXICOLOGY DATA FOR COMPONENTS

	Route	Species	Test Results
Hydrogen Peroxide (10%)	Oral LD <sub>50</sub>	Rat	>5,000 mg/kg
Hydrogen Peroxide (70%)	Dermal LD <sub>50</sub>	Rabbit	9,200 mg/kg
Hydrogen Peroxide (35%)	Dermal LD <sub>50</sub>	Rabbit	>2,000 mg/kg
Hydrogen Peroxide (50%)	LC <sub>50</sub> (4 hr, vapor)	Rat	170 mg/m <sup>3</sup>
Hydrogen Peroxide (70%)	RD <sub>50</sub> (aerosol)	Mouse	665 mg/m <sup>3</sup>
White Mineral Oil	Oral LD <sub>50</sub>	Rat	> 5,000 mg/kg
White Mineral Oil	Dermal LD <sub>50</sub>	Rabbit	> 2,000 mg/kg
White Mineral Oil	LC <sub>50</sub> (4 hr, Mists)	Rat	> 5.2 mg/L



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**Skin Corrosion/Irritation:**

*Hydrogen Peroxide:* 3-8% - Not Irritating; 10% - Slightly Irritating; 35% - Moderately Irritating (1.6/8.0); >50% - Corrosive  
*Mineral Oil:* Not Irritating

**Serious Eye Damage/Irritation:**

*Hydrogen Peroxide:* 5% - Slightly Irritating; 8% - Moderately Irritating; 10% - Highly Irritating; 12% - Corrosive  
*Mineral Oil:* Slightly Irritating

**Skin Sensitization:**

*Hydrogen Peroxide:* Not considered to be a sensitizer  
*Mineral Oil:* Not considered to be a sensitizer

**CHRONIC HEALTH HAZARDS:**

**REPEAT DOSE TOXICITY:**

NOAEL (Hydrogen Peroxide, oral): 100 ppm (26 mg/kg bw male mice)  
LOAEL (Hydrogen Peroxide, oral): 300 ppm (76 mg/kg bw male mice)  
NOAEL (Mineral Oil, oral): 2 - 4,350 mg/kg bw male/female rats  
LOAEL (Mineral Oil, oral): 1.7 - 340 mg/kg/day male/female rats

**ASPIRATION:**

Aspiration of mineral oil into the lungs may cause chemical pneumonitis or pulmonary edema. As a complete mixture, low volume developers containing mineral oil are not expected to pose an aspiration hazard.

**CARCINOGENICITY:**

Component Name (CAS-No.)	OSHA	ACGIH	NTP	IARC
Hydrogen Peroxide (7722-84-1)	--	TLV-A3	--	IARC-3
Mineral Oils, highly refined	--	TLV-A4	--	IARC-3

Notes:

ACGIH TLV-A3 - This reference indicates that the material is "Confirmed Animal Carcinogen with Unknown Relevance to Humans".

ACHIH TLV-A4 - This reference indicates that the material is "Not Classifiable as a Human Carcinogen".

IARC-3 - This reference indicates that the material is "Unclassifiable as to Carcinogenicity to Humans".

**MUTAGENICITY:**

Hydrogen peroxide (in high percentages) has been shown to be a mutagen in a variety of *in vitro* test systems. Available studies are not in support of a significant mutagenicity for hydrogen peroxide under *in vivo* conditions.

Mineral Oil has provided negative results in a variety of *in vitro* tests.

**REPRODUCTIVE TOXICITY:**

Mineral Oil: No adverse effects (NOAEL > 4,350 mg/kg bw)

**DEVELOPMENTAL TOXICITY/TERATOGENICITY:**

Mineral Oil: No maternal toxicity or teratogenic effects (NOAEL > 4,350 mg/kg bw)

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**SECTION 12: ECOLOGICAL INFORMATION**

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Contact with the environment should be avoided. Spills and leaks should be immediately cleaned up and removed. Published information regarding ingredients listed in this document are found below; where data is not listed, documentation was unavailable.

## ACUTE AND PROLONGED TOXICITY TO FISH

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	LC <sub>50</sub> (US EPA)	16.4 mg/l	Pimephales promelas	96 h
Hydrogen Peroxide	LC <sub>50</sub>	37.4 mg/L	Ictalurus punctatus	96 h
Mineral Oil	LC <sub>50</sub>	> 1000 mg/L	Oncorhynchus mykiss	96 h

## ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC <sub>50</sub>	2.0-2.6 mg/L	Daphnia magna	24 h
Hydrogen Peroxide	EC <sub>50</sub> (US EPA)	2.4 mg/L	Daphnia pulex	48 h
Mineral Oil	EC <sub>50</sub>	> 100 mg/L	Daphnia magna	48 h

## TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC <sub>50</sub> (OECD 201)	2.5 mg/L	Chlorella vulgaris	72 h
Hydrogen Peroxide	EC <sub>50</sub> (OECD 201)	0.63 mg/L	Sceletonema costatum	72 h
Mineral Oil	EC <sub>50</sub> (OECD 201)	≥ 100 mg/L	Pseudokirchneriella subcapitata	72 h

## TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Hydrogen Peroxide	EC <sub>50</sub> (OECD 209)	466 mg/l	Activated Sludge	30 min

## PERSISTENCY AND DEGRADABILITY:

### *Hydrogen Peroxide:*

Hydrogen peroxide is biologically degradable. Hydrogen peroxide can be considered as readily biodegradable in the aquatic systems. In soil hydrogen peroxide is normally a short-lived substance. Hydrogen peroxide degrades in the atmosphere within the light spectrum with hydroxyl radicals in the gas phase and subsequent photolysis.

### *Mineral Oil:*

Mineral oil has shown evidence of primary biodegradability. Mineral oil has little to no tendency to partition to air, but any material that does will be rapidly photodegraded.

## BIOACCUMULATIVE POTENTIAL:

Hydrogen peroxide is reactive and short-lived polar substance and no bioaccumulation is expected. The estimated log K<sub>ow</sub> of about -1.5 indicates negligible potential of bioconcentration in aquatic organisms. BCFs calculated according to the TGD for fish and earthworm are low, 1.4 and 3.3, respectively.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**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:** Containers should be completely closed and meet applicable USDOT packaging specifications. Packaging materials should not include incompatible materials noted in Section 10. Plastic packaging is recommended.

**WASTE DISPOSAL METHOD:** High volume developer products are RCRA ignitable hazardous waste when intended for disposal. Physical and/or chemical deactivation/degradation of the peroxide solution is the recommended method of treatment and disposal for these products.

### **RCRA HAZARD CLASS: D001**

Follow all local governmental requirements intended for disposal.



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## **SECTION 14: TRANSPORT INFORMATION**

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### **North American Ground Transportation**

- **IN CONSUMER PACKAGING:** Limited Quantity/Consumer Commodity (≤ 5L)
- **OTHER THAN CONSUMER PACKAGING:**
  - UN ID Number:** UN 2984
  - Proper Shipping Name:** Hydrogen Peroxide, aqueous solutions
  - Hazard Class:** 5.1
  - Packing Group:** III
  - Label Statements:** Oxidizer (Division 5.1)

### **Transport Via Water**

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 5L)
  - UN ID Number:** UN 2984
  - Proper Shipping Name:** Hydrogen Peroxide, aqueous solutions
  - Hazard Class:** 5.1
  - Packing Group:** III
  - Label Statements:** Oxidizer (Division 5.1)
- **OTHER THAN CONSUMER PACKAGING:**
  - UN ID NUMBER:** UN 2984
  - PROPER SHIPPING NAME:** Hydrogen Peroxide, aqueous solutions
  - HAZARD CLAS:** 5.1
  - PACKING GROUP:** III
  - LABEL STATEMENTS:** Oxidizer (Division 5.1)

### **Transport Via Air (Domestic/International)**

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 0.5L)
  - UN ID Number:** UN 2984
  - Proper Shipping Name:** Hydrogen Peroxide, aqueous solutions
  - Hazard Class:** 5.1
  - Packing Group:** III
  - Label Statements:** Oxidizer (Division 5.1)
- **OTHER THAN CONSUMER PACKAGING:**
  - UN ID Number:** UN 2984
  - Proper Shipping Name:** Hydrogen Peroxide, aqueous solutions
  - Hazard Class:** 5.1
  - Packing Group:** III
  - Label Statements:** Oxidizer (Division 5.1)

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## **SECTION 15: REGULATORY INFORMATION**

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**National Fire Protection Association Codes:** Health: 3 Fire: 0 Reactivity: 1 Other: None

**Workplace Hazardous Materials Identification System:** Class C; Oxidizing Material ; Class E; Corrosive Material

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

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## **SECTION 16: OTHER INFORMATION**

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**PREPARATION INFORMATION:** This document replaces the version dated June 22, 2009 and all previous versions of safety data sheets related to this product.

Preparer: Ronald Weslosky/Chandra L. Jennings