

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: Garnier Nutrisse Multi-Lights Highlighting Powder, Garnier Color Breaks Lightening Powder, L'Oreal Chunking Blocks of Highlights Lightening Powder, L'Oreal Colour Rays Highlighting Powder, L'Oreal Design & Frost Lightening Powder, L'Oreal la Petite Frost Lightening Powder, L'Oreal Professionnel Platine Precision De-dusted Powder Lightener, L'Oreal Technique Super Oreal Blanc Powder Bleach, L'Oreal Touch-On Highlighting Powder, L'Oreal Couleur Experte Illuminating Powder



Recommendations on use: Personal care product to be mixed with companion product(s) in accordance with instructions and applied to hair for lightening effect.

Restrictions on use: For external use only. Use only as directed.

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: DANGER

Symbol	Classification	Hazard Statement	Prevention Statements
	Oxidizing Solids Category 2	May intensify fire Oxidizer	<ul style="list-style-type: none"> Keep away from heat. Keep/Store away from metal and combustible materials. Take any precaution to avoid mixing with combustibles.
	Eye Damage Category 1	Causes serious eye damage	<ul style="list-style-type: none"> Wash hands and all skin surfaces contacted thoroughly after handling Wear nitrile or vinyl gloves. Wear eye protection appropriate for the manufacturing operation being performed (goggles or face shield).

Symbol	Classification	Hazard Statement	Prevention Statements
	Sensitization Respiratory	May cause allergy or asthma symptoms or breathing difficulties if inhaled	<ul style="list-style-type: none"> Avoid breathing dust. In case of inadequate ventilation wear respiratory protection
	Acute Toxicity Oral Category 4	Harmful if swallowed	<ul style="list-style-type: none"> Do not eat, drink or smoke when using this product
No symbol Required	Sensitization – Skin Category 1	May cause an allergic skin reaction	<ul style="list-style-type: none"> Contaminated work clothing must not be allowed out of the workplace
No symbol Required	Skin Irritation Category 2	Causes skin irritation	<ul style="list-style-type: none"> See prevention statements above
No symbol Required	Specific Target Organ Toxicity (Single Exposure) Category 3	May cause respiratory irritation	<ul style="list-style-type: none"> Use only outdoors or in a well-ventilated area

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/directions before use. Keep from heat and moisture. Do not use metal utensils.

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>
Magnesium Peroxide	1335-26-8	≤ 0.5%
EDTA	60-00-4	≤ 0.8%
Titanium Dioxide	13463-67-7	≤ 0.8%
Sodium Metasilicate	6834-92-0	≤ 1.6%
Diethylhexyl Sodium Sulfosuccinate	577-11-7	≤ 2.0%
Ammonium Chloride	12125-02-9	≤ 3.0%
Sodium Persulfate	7775-27-1	≤ 11.0%
Sodium Silicate	1344-09-8	≤ 23.0%
Potassium Persulfate	7727-21-1	≤ 39.0%

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

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. **If skin irritation or rash occurs:** Get medical advice/attention.

IF INHALED: If breathing is difficult, remove person to fresh air and keep in a position comfortable for breathing. **If experiencing respiratory symptoms:** Call a poison control center or get medical advice/attention.

IF SWALLOWED: Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious individual. Call a poison control center or get medical advice/attention if you feel unwell.

SYMPTOMS/EFFECTS: Causes serious eye damage. May cause asthma symptoms or breathing difficulties. Harmful if swallowed. May cause an allergic skin reaction. Causes skin irritation. May cause respiratory 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. 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: Follow National Fire Protection Association Guidelines or local guidelines appropriate for emergency response.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Persulfates yield oxygen and may stimulate combustion of flammable and combustible materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal degradation may produce oxygen, ammonia, oxides of carbon, sulfur, 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 and where mixture with organic material is possible. 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 associated risks.

If the location is not hazardous and only a small amount of material is released, the material can be swept up or wiped with damp towels/sponges 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 and protective clothing (e.g. apron) may be required for clean-up of large releases. 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 particulate cartridges. See also section 8 of this document.

Notes for those trained to participate in an emergency:

ACCIDENTAL RELEASE MEASURES: Materials in powder form are not expected to migrate greatly during release. Released material should be swept up and accumulated in appropriate UN specification containers while minimizing dust generation. Wash area completely with water. Take care to avoid contact with wet surfaces or walkways that may become slick when residue is present. Rinse response equipment (e.g. towels, sponges, mops) thoroughly prior to disposal or storage. Prohibit discharge to drains, soil, surface and ground waters.

Recommendations for personal protective equipment selection are noted above. 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 chemicals. Employees should be advised to wear appropriate protective equipment in the manufacturing environment. See section 8 of this document for protective equipment selection. Use only with adequate ventilation and avoid inhalation. Avoid contact with eyes and skin. Do not use with metal utensils. All manufacturing should be performed indoors, in an enclosed environment.

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): Keep in a cool and well-ventilated area. Keep containers closed when not in use. Store away from moisture. Do not store metal utensils with product. This material should be stored locked up in an area where production inventory may be controlled by authorized personnel. Store in a location where spill containment will be easily accessible and releases can be contained.

Storage precautions for packaged product: See consumer packaging.

Keep away from open drains and access to the environment.

Incompatible materials: Organic compounds and reducing agents. Store away from incompatible materials and moisture.

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
Titanium Dioxide (13463-67-7)	OSHA PEL	--	15 ^o	--	--
	ACGIH TLV	--	10	--	--
	NIOSH REL	--	--	--	--
Ammonium Chloride (Fume) (12125-02-9)	OSHA PEL	--	--	--	--
	ACGIH TLV	--	10	--	20
	NIOSH REL	--	10	--	20
Sodium Persulfate (7775-27-1)	OSHA PEL	--	--	--	--
	ACGIH TLV	--	0.1	--	--
	NIOSH REL	--	--	--	--
Potassium Persulfate (Persulfates) 7727-21-1	OSHA PEL	--	--	--	--
	ACGIH TLV	--	0.1	--	--
	NIOSH REL	--	--	--	--

Notes: ° (OSHA) – Total Dust

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 oxidizing 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. Contact with eyes should be avoided. For handling of large quantities of material, safety glasses with side shields/goggles are recommended.

Skin Protection (Non-Emergency): Gloves should be worn when mixing kit components and applying mixture. 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 such may be considered. Ensure that the respirator meets current local occupational health and safety standards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Finely divided, free-flowing powder
ODOR:	Not Available
ODOR THRESHOLD:	Not Available
pH:	9.9 – 10.5 (Solution)
MELTING/FREEZING POINT:	F: Not Available C: Not Available
BOILING POINT:	F: Not Available C: Not Available
FLASH POINT:	F: > Not Applicable C: >Not Applicable METHOD USED: Not Applicable
EVAPORATION RATE:	Not Applicable
FLAMMABILITY:	Not Applicable
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):	Not Available
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, moisture and contamination with organic materials and metal utensils.

INCOMPATIBILITY (MATERIAL TO AVOID): Organic compounds and reducing agents.

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

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: Causes skin irritation

SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye damage

RESPIRATORY/SKIN SENSITIZATION: May cause allergic reaction/breathing difficulty; May cause allergic skin reaction

INGESTION: Harmful if swallowed.

INHALATION: May cause respiratory irritation

ROUTES OF EXPOSURE: Eyes, skin, ingestion, inhalation

SYMPTOMS: Causes serious eye damage. May cause asthma symptoms or breathing difficulties. Harmful if swallowed. May cause an allergic skin reaction. Causes skin irritation. May cause respiratory irritation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Existing dermatological conditions (such as eczema) and respiratory conditions (such as bronchial asthma and/or bronchitis) may be exacerbated.

ACUTE TOXICOLOGY DATA FOR COMPONENTS

Material	Route	Species	Test Results
EDTA	Oral LD ₅₀	Rat (OECD 401 eq.)	4,500 mg/kg bw
EDTA	Inh. LC ₅₀ (6h)	Rat (Dust)	>1 mg/l air
Titanium Dioxide	Oral LD ₅₀	Rat	>5,000 mg/kg bw
Sodium Metasilicate	Oral LD ₅₀	Rat	1,152 mg/kg bw
Diethylhexyl Sodium Sulfosuccinate	Oral LD ₅₀	Rat (OECD 401 eq.)	4,200 mg/kg bw
Diethylhexyl Sodium Sulfosuccinate	Dermal LD ₅₀	Rabbit (OECD 402 eq.)	>10,000 mg/kg bw
Ammonium Chloride	Oral LD ₅₀	Rat (OECD 401 eq.)	1,410 mg/kg bw
Ammonium Chloride	Dermal LD ₅₀	Rat (EU Method B.3)	>2,000 mg/kg bw
Sodium Persulfate	Oral LD ₅₀	Rat (OECD 401 eq.)	920 mg/kg bw
Sodium Persulfate	Dermal LD ₅₀	Rabbit	>10,000 mg/kg bw
Sodium Persulfate	LC ₅₀ (4 hr)	Rat (OECD 403)	>5.1 mg/l air
Sodium Silicate	Oral LD ₅₀	Rat (OECD 401 eq.)	3,400 mg/kg bw
Sodium Silicate	Dermal LD ₅₀	Rat	>5,000 mg/kg bw
Potassium Persulfate	Oral LD ₅₀	Rat (OECD 401 eq.)	1,130 mg/kg bw
Potassium Persulfate	Dermal LD ₅₀	Rabbit	>10,000 mg/kg bw
Potassium Persulfate	LC ₅₀ (1 hr)	Rat	>42.9 mg/l air

Skin Corrosion/Irritation:

EDTA:

Not Irritating (Rabbit)

Titanium Dioxide:

Not Irritating (Rabbit)

Sodium Metasilicate:

Corrosive (Rabbit, OECD 404)

Diethylhexyl Sodium Sulfosuccinate:

Irritating (Rabbit, OECD 404)

Ammonium Chloride:

Not Irritating (Rabbit, Draize)

Sodium Persulfate:

Irritating (Rabbit)

Sodium Silicate:

Corrosive (≥ 28%); Irritating (<28%) (Rabbit, 16 CFR 1500.42)

Potassium Persulfate:

Irritating (Rabbit)

Serious Eye Damage/Irritation:

<i>EDTA:</i>	Irritating (Rabbit)
<i>Titanium Dioxide:</i>	Not Irritating (Rabbit)
<i>Sodium Metasilicate:</i>	Corrosive (In Vitro, IRE)
<i>Diethylhexyl Sodium Sulfosuccinate:</i>	Corrosive (Rabbit, OECD 405)
<i>Ammonium Chloride:</i>	Irritating (Rabbit)
<i>Sodium Persulfate:</i>	Irritating (Rabbit)
<i>Sodium Silicate:</i>	Corrosive (≥ 39%); Irritating (<39%) (Rabbit, OECD 404)
<i>Potassium Persulfate:</i>	Irritating (Rabbit)

Respiratory Irritation:

<i>Sodium Metasilicate:</i>	Irritating
<i>Sodium Persulfate:</i>	Irritating (Human)
<i>Sodium Silicate:</i>	Irritating
<i>Potassium Persulfate:</i>	Irritating (Human)

Skin Sensitization:

<i>EDTA:</i>	Not Sensitizing (Guinea Pig, OECD 406)
<i>Sodium Metasilicate:</i>	Not Sensitizing (Guinea Pig, OECD 429)
<i>Diethylhexyl Sodium Sulfosuccinate:</i>	Not Sensitizing (Human, RIPT)
<i>Ammonium Chloride:</i>	Not Sensitizing (Guinea Pig, GPMT)
<i>Sodium Persulfate:</i>	Sensitizing (Guinea Pig, OECD 406)
<i>Sodium Silicate:</i>	Not Sensitizing (Human, RIPT)
<i>Potassium Persulfate:</i>	Sensitizing (Mouse, OECD 429 eq.)

CHRONIC HEALTH HAZARDS:

REPEAT DOSE TOXICITY:

NOAEL (<i>Titanium Dioxide</i> , oral): 24,000 mg/kg (Rat)
NOAEL (<i>Sodium Metasilicate</i> , oral): >227 mg/kg bw/day (Rat, 90d)
NOAEL (<i>Diethylhexyl Sodium Sulfosuccinate</i> , oral): 750 mg/kg/day (Rat, OECD 408 eq., 90d)
NOAEL (<i>Ammonium Chloride</i> , oral): 1,695 mg/kg bw/day (Rat, OECD 408 eq., 90d)
LOAEL (<i>Sodium Persulfate</i>): 200 mg/kg bw/day (Rat, OECD 408 eq., 90d)
NOAEL (<i>Sodium Silicate</i> , oral): 2,400 mg/kg bw/day (Rat, OECD 407 eq., 90d)
NOAEL (<i>Potassium Persulfate</i> , oral): 131.5 mg/kg bw/day (Rat, OECD 407 eq., 28d)

CARCINOGENICITY:

Component Name (CAS-No.)	OSHA	ACGIH	NTP	IARC
Titanium Dioxide (13463-67-7)	--	TLV-A4	--	IARC-2B

ACGIH TLV-A4 – This reference indicates that the material is “Not Classifiable as a Human Carcinogen”.

IARC-2B – This reference indicates that the material is “Possibly Carcinogenic to Humans”

These products may contain titanium dioxide which has received its carcinogenic classification based on exposure in the respirable form. These materials in this product are not in their respirable form and are intended for application to hair.

MUTAGENICITY:

<i>Titanium Dioxide:</i>	A variety of <i>in vitro</i> tests have produced negative results.
<i>Sodium Metasilicate:</i>	A variety of <i>in vitro</i> and <i>in vivo</i> tests have produced negative results.
<i>Diethylhexyl Sodium Sulfosuccinate:</i>	A variety of <i>in vitro</i> tests have produced negative results.
<i>Ammonium Chloride:</i>	A variety of <i>in vivo</i> tests have produced negative results.
<i>Sodium Persulfate:</i>	A variety of <i>in vitro</i> and <i>in vivo</i> tests have produced negative results.
<i>Sodium Silicate:</i>	A variety of <i>in vitro</i> and <i>in vivo</i> tests have produced negative results.
<i>Potassium Persulfate:</i>	A variety of <i>in vitro</i> tests have produced negative results.

REPRODUCTIVE TOXICITY:

Diethylhexyl Sodium Sulfosuccinate: NOEL: 1% (Rat, OECD 416 eq.) – No reproductive effects
Sodium Silicate: NOAEL: >159 mg/kg bw/d (Rat) – No reproductive effects

DEVELOPMENTAL TOXICITY/TERATOGENICITY:

EDTA: NOAEL: ≥ 967 mg/kg bw/d (Rat) – No developmental effects
Sodium Metasilicate: NOAEL: > 200 mg/kg bw/day (Mouse)
Diethylhexyl Sodium Sulfosuccinate: NOAEL: 1,074 mg/kg bw/d (Rat, OECD 414 eq.) – No developmental effects
Ammonium Chloride: NOAEL: 8.9 mg/kg (Rat) – No development effects

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
EDTA	LC ₅₀	159 mg/L	Lepomis macrochirus	96 h
Titanium Dioxide	LC ₅₀	>1,000 mg/L	Leuciscusidus idus	48 h
Sodium Metasilicate	LC ₅₀ (ISO 7346)	210 mg/L	Danio rerio	96 h
Diethylhexyl Sodium Sulfosuccinate	LC ₅₀ (OECD 203)	27.2 mg/L	Oncorhynchus mykiss	96 h
Ammonium Chloride	LC ₅₀ (APHA E03-05)	209 mg/L	Cyprinus carpio	96 h
Sodium Persulfate	LC ₅₀ (EPA OPP 72-1)	163 mg/L	Oncorhynchus mykiss	96 h
Sodium Silicate	LC ₅₀ (OECD 203)	1,108 mg/L	Danio rerio	96 h
Potassium Persulfate	LC ₅₀	76 mg/L	Oncorhynchus mykiss	96 h

ACUTE TOXICITY TO AQUATIC INVERTEBRATES

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
EDTA	EC ₅₀ (DIN 38412, 11)	625 mg/L	Daphnia Magna	25 h
Diethylhexyl Sodium Sulfosuccinate	EC ₅₀ (OECD 202 eq.)	34.0 mg/L	Daphnia Magna	48 h
Ammonium Chloride	EC ₅₀ (ASTM E729-80)	101 mg/L	Daphnia Magna	48 h
Sodium Persulfate	EC ₅₀ (EPA OPP 72-2)	133 mg/L	Daphnia Magna	48 h
Sodium Silicate	EC ₅₀ (EU Method C.2)	1,700 mg/L	Daphnia Magna	48 h
Potassium Persulfate	EC ₅₀	120 mg/L	Daphnia Magna	48 h

TOXICITY TO AQUATIC PLANTS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
Titanium Dioxide	EC ₅₀	61 mg/L	Pseudokirchneriella subcapitata	72 h
Diethylhexyl Sodium Sulfosuccinate	EC ₅₀ (EU Method C.3)	82.5 mg/L	Desmodesmus subspicatus	72 h
Ammonium Chloride	EC ₅₀	1,300 mg/L	Chlorella vulgaris	5 d
Sodium Persulfate	EC ₅₀ (OECD 201)	116 mg/L	Pseudokirchneriella subcapitata	72 h
Sodium Silicate	EC ₅₀ (DIN 38412, 9)	>345.4 mg/L	Desmodesmus subspicatus	72 h

TOXICITY TO MICROORGANISMS

INGREDIENT NAME	TEST	RESULT	SPECIES	EXPOSURE
EDTA	EC ₅₀	2.4 mmol/L	Microorganism	24 h
Titanium Dioxide	EC ₅₀	5-30 mg/L	Activated Sludge	3 h
Sodium Metasilicate	EC ₅₀ (OECD 209)	> 100 mg/L	Activated Sludge	3 h
Diethylhexyl Sodium Sulfosuccinate	EC ₅₀ (DIN 38412, 8)	164 mg/L	Pseudomonas putida	16.5 h
Ammonium Chloride	EC ₅₀ (OECD 209)	1,618 mg/L	Activated Sludge	30 min

Sodium Silicate	EC ₀ (DIN 38412, 27)	3,454 mg/L	Pseudomonas putida	30 min
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PERSISTENCY AND DEGRADABILITY:

EDTA: 37% (14d) – OECD 302 B – Inherently Biodegradable
Diethylhexyl Sodium Sulfosuccinate: 91.2% (28d) – ISO 14593 – Readily Biodegradable

BIOACCUMULATIVE POTENTIAL:

EDTA: BCF: 1.1; log Pow: -3.86 (Est.) – Not expected to bioaccumulate
Sodium Metasilicate: Not expected to bioaccumulate
Ammonium Chloride: log Pow: -4.37 – Not expected to bioaccumulate
Sodium Persulfate: Not expected to bioaccumulate
Sodium Silicate: Not expected to bioaccumulate
Potassium Persulfate: Not expected 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, plastic/lined drums for solids. These containers should meet the packaging specifications required for DOT compliance. Packaging containers must not include incompatible materials.

WASTE DISPOSAL METHOD: As manufactured, this product exhibits the ignitable (D001) RCRA characteristic of hazardous waste. Controlled incineration at a licensed waste facility is the recommended technology for treatment and disposal. Material must not be disposed of 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 (≤ 1 kg)
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Exempt – Limited Quantity Marking Only

- **OTHER THAN CONSUMER PACKAGING:**
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Oxidizing (Division 5.1)

Transport Via Water

- **IN CONSUMER PACKAGING:** Limited Quantity/Consumer Commodity (≤ 1 kg)
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Exempt – Limited Quantity Marking Only

- **OTHER THAN CONSUMER PACKAGING:**
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Oxidizing (Division 5.1)

Transport Via Air (Domestic/International)

- **IN CONSUMER PACKAGING:** Limited Quantity (≤ 0.5 kg) (*Not eligible for ID 8000, Consumer Commodity*)
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Limited Quantity Marking & Oxidizer (Division 5.1)
- **OTHER THAN CONSUMER PACKAGING:**
 - UN ID Number:** UN 1479
 - Proper Shipping Name:** Oxidizing solid, n.o.s.
 - Technical Name:** Potassium persulfate, sodium persulfate
 - Hazard Class:** 5.1
 - Packing Group:** II
 - Label Statements:** Oxidizing (Division 5.1)

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

SECTION 15: REGULATORY INFORMATION

National Fire Protection Association Codes: Health: 2 Fire: 0 Reactivity: 1 Other: OX

Workplace Hazardous Materials Identification System: Class C; Oxidizing Material; Class D; Division 2, Subdivision B; Corneal Damage/Skin 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)