

**1. Identification**

**Product identifier** REDKEN FLASH LIFT BONDER INSIDE  
**Other means of identification**  
**SDS number** 41-23-0000007  
**Recommended use** Personal care product used for cosmetic effect.  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**

**US Address:** L'Oreal USA Products, Inc  
 133 Terminal Avenue  
 Clark, NJ 07066  
 USA

**Canadian Address:** L'Oreal Canada  
 4895 rue Hickmore  
 Ville St-Laurent, H4T 1K5  
 Canada

**Emergency Phone # :** 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 # :** 412-390-3326

**2. Hazard(s) identification**

<b>Physical hazards</b>	Self-reactive substances and mixtures	Type F
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**



**Signal word** Danger

**Hazard statement** Heating may cause a fire. Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

## Precautionary statement

### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing and other combustible materials. Keep only in original container. Avoid breathing dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

### Response

If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

### Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store at temperatures not exceeding 25°C / 77°F. Store away from other materials.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

None known.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
POTASSIUM PERSULFATE		7727-21-1	48.31
SODIUM SILICATE		1344-09-8	16.56
AMMONIUM PERSULFATE		7727-54-0	4.73
CITRIC ACID		5949-29-1	3.64
SODIUM METASILICATE		6834-92-0	2.37
MINERAL OIL		8042-47-5	1.55

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

### Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

### Eye contact

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

### Ingestion

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

### Most important symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water spray. Foam. Powder. Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use water spray to cool unopened containers.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Heating may cause a fire.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Minimize dust generation and accumulation. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.  Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.  Avoid discharge into drains, water courses or onto the ground.
<b>Environmental precautions</b>	

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust generation and accumulation. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Provide appropriate exhaust ventilation at places where dust is formed. Do not get this material in contact with eyes. Do not taste or swallow. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Keep only in the original container. Store in a well-ventilated place. Store away from other materials. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
MINERAL OIL (CAS 8042-47-5)	PEL	5 mg/m <sup>3</sup>	Mist.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
AMMONIUM PERSULFATE (CAS 7727-54-0)	TWA	0.1 mg/m <sup>3</sup>	
MINERAL OIL (CAS 8042-47-5)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
POTASSIUM PERSULFATE (CAS 7727-21-1)	TWA	0.1 mg/m <sup>3</sup>	

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust/particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Provide eyewash station. Eye wash fountain and emergency showers are recommended.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles) and a face shield.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Dust & vapor respirator.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.

<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>pH in aqueous solution</b>	9.6 - 10.4 (1%)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat. Contact with incompatible materials.
<b>Incompatible materials</b>	Combustible material.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Harmful if swallowed.

Product	Species	Test Results
REDKEN FLASH LIFT BONDER INSIDE		
<u>Acute</u>		
<b>Oral</b>		
ATEmix		1407.1826 mg/kg
<b>Components</b>		
<b>Species</b>		
<b>Test Results</b>		
AMMONIUM PERSULFATE (CAS 7727-54-0)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg bw OECD 402
<b>Inhalation</b>		
LC50	Rat	> 2.95 mg/l, 4 h EPA OPP 81-3
<b>Oral</b>		
LD50	Rat	700 mg/kg bw OECD 401
CITRIC ACID (CAS 5949-29-1)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Mouse	5400 mg/kg

Components	Species	Test Results
MINERAL OIL (CAS 8042-47-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg OECD 402
<b>Inhalation</b>		
<i>Aerosol</i>		
LC50	Rat	> 5 mg/L air, 4 h OECD 403
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg OECD 401
POTASSIUM PERSULFATE (CAS 7727-21-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 10000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 42.9 mg/l, 1 h
<b>Oral</b>		
LD50	Rat	1130 mg/kg OECD 401
SODIUM METASILICATE (CAS 6834-92-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5000 mg/kg Based on test data for structurally similar materials.
<b>Inhalation</b>		
LC50	Rat	> 2.06 mg/l, 4.4 h Based on test data for structurally similar materials.
<b>Oral</b>		
LD50	Rat	1152 mg/kg
SODIUM SILICATE (CAS 1344-09-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg bw EPA OPPTS 870.1200
<b>Inhalation</b>		
LC50	Rat	> 2.06 mg/L air, 4.4 h EPA OPPTS 870.1300
<b>Oral</b>		
LD50	Rat	3400 mg/kg bw OECD 401

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.

**Irritation Corrosion - Skin**

SODIUM METASILICATE	OECD 404 Result: Corrosive Species: Rabbit
AMMONIUM PERSULFATE	OECD 404 Result: Irritating Species: Rabbit
SODIUM SILICATE	OECD 404 Result: Irritating Species: Rabbit
MINERAL OIL	OECD 404 Result: Not Irritating Species: Rabbit
CITRIC ACID	OECD 404 Result: Slightly Irritating Species: Rabbit

**Irritation Corrosion - Skin**  
POTASSIUM PERSULFATE

Result: Irritating  
Species: Human

**Serious eye damage/eye irritation** Causes serious eye damage.

**Irritation Corrosion - Eye**  
SODIUM METASILICATE

IRE  
Result: Corrosive  
Species: In vitro

AMMONIUM PERSULFATE

OECD 405  
Result: Irritating  
Species: Rabbit

CITRIC ACID

OECD 405  
Result: Irritating  
Species: Rabbit

MINERAL OIL

OECD 405  
Result: Not Irritating  
Species: Rabbit

SODIUM SILICATE

Result: Corrosive  
Species: Rabbit

POTASSIUM PERSULFATE

Result: Irritating  
Species: Human

**Respiratory or skin sensitization**

**Respiratory sensitization** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

AMMONIUM PERSULFATE

Result: Sensitizing  
Species: Human

POTASSIUM PERSULFATE

Result: Sensitizing  
Species: Human

**Skin sensitization** May cause an allergic skin reaction.

**Sensitization**

AMMONIUM PERSULFATE

OECD 406  
Result: Sensitizing  
Species: Guinea pig

SODIUM SILICATE

OECD 429  
Result: Not Sensitizing  
Species: Mouse

POTASSIUM PERSULFATE

OECD 429  
Result: Sensitizing  
Species: Mouse

**Skin sensitization**

CITRIC ACID

OECD 406  
Result: Not Sensitizing  
Species: Guinea pig

MINERAL OIL

OECD 406  
Result: Not Sensitizing  
Species: Guinea pig

SODIUM METASILICATE

OECD 429  
Result: Not Sensitizing  
Species: Mouse

POTASSIUM PERSULFATE

OECD 429  
Result: Sensitizing  
Species: Guinea pig

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Mutagenicity**

CITRIC ACID

Result: In vitro and in vivo tests did not show mutagenic effects.

SODIUM METASILICATE

Result: In vitro and in vivo tests did not show mutagenic effects.

SODIUM SILICATE

Result: In vitro and in vivo tests did not show mutagenic effects.

AMMONIUM PERSULFATE

Result: In vitro tests did not show mutagenic effects

MINERAL OIL

Result: In vitro tests did not show mutagenic effects

POTASSIUM PERSULFATE

Result: In vitro tests did not show mutagenic effects

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

MINERAL OIL (CAS 8042-47-5)

3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Developmental effects**

SODIUM METASILICATE	> 200 mg/kg bw/d Result: NOAEL Species: Mouse
SODIUM SILICATE	> 200 mg/kg bw/d Result: NOAEL Species: Rat
AMMONIUM PERSULFATE	> 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
CITRIC ACID	> 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat
MINERAL OIL	> 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat

**Reproductivity**

SODIUM METASILICATE	> 159 mg/kg bw/d Result: NOAEL Species: Rat
SODIUM SILICATE	> 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat
AMMONIUM PERSULFATE	> 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
CITRIC ACID	> 2500 mg/kg bw/d, No effects on fertility Result: NOAEL Species: Rat
MINERAL OIL	>= 2000 mg/kg bw/d OECD 415, No effects on fertility Result: NOAEL Species: Rat

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

SODIUM METASILICATE	Result: Irritating
SODIUM SILICATE	Result: Irritating
POTASSIUM PERSULFATE	Result: Irritating Species: Human

**Specific target organ toxicity - repeated exposure** Not classified.

MINERAL OIL	> 2000 mg/kg bw/d OECD 411, Dermal Result: NOAEL Species: Rat Test Duration: 90 d
SODIUM METASILICATE	> 227 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
MINERAL OIL	> 50 mg/m3 air OECD 412, Inhalation Result: NOAEC Species: Rat Test Duration: 28 d >= 1200 mg/kg bw/d OECD 453, Oral Result: NOAEL Species: Rat Test Duration: 2 years



**Specific target organ toxicity - repeated exposure**

AMMONIUM PERSULFATE	10.3 mg/m <sup>3</sup> , Inhalation Result: NOAEC Species: Rat Test Duration: 90 d
POTASSIUM PERSULFATE	131.5 mg/kg bw/d OECD 407 Result: NOAEL Species: Rat Test Duration: 28 d
SODIUM SILICATE	2400 mg/kg bw/d OECD 407 Result: NOAEL Species: Rat Test Duration: 28 d
CITRIC ACID	4000 mg/kg bw/d, Oral Result: NOAEL Species: Rat Test Duration: 10 d
AMMONIUM PERSULFATE	41.1 mg/kg bw/d OECD 407, Oral Result: NOAEL Species: Rat Test Duration: 28 d

**Aspiration hazard** Not an aspiration hazard.

**Further information** May cause allergic respiratory and skin reactions.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
AMMONIUM PERSULFATE (CAS 7727-54-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Pseudokirchneriella subcapitata 83.7 mg/l, 72 h
Crustacea	EC50	Daphnia magna 120 mg/l, 48 h
Fish	LC50	Oncorhynchus mykiss 76 mg/l, 96 h
Other	EC10	Pseudomonas putida 36 mg/l, 18 h
<i>Chronic</i>		
Algae	NOEC	Desmodesmus subspicatus 32 mg/l, 72 h OECD 201
CITRIC ACID (CAS 5949-29-1)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	LOEC	Microcystis aeruginosa 80 mg/l, 7 d
Crustacea	EC50	Daphnia magna 1535 mg/l, 24 h
Fish	LC50	Leuciscus idus 440 - 760 mg/l, 96 h
Other	NOAEC	Pseudomonas putida 18 h
MINERAL OIL (CAS 8042-47-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	NOEL	Pseudokirchneriella subcapitata > 100 mg/l, 72 h OECD 201
Crustacea	EL50	Daphnia magna > 100 mg/l, 48 h OECD 202
Fish	LL50	Oncorhynchus mykiss > 100 mg/l, 96 h OECD 203
<i>Chronic</i>		
Crustacea	NOEC	Daphnia magna 10 mg/l, 21 d OECD 211

Components	Species	Test Results
<b>SODIUM METASILICATE (CAS 6834-92-0)</b>		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Pseudokirchneriella subcapitata > 207 mg/l, 72 h DIN 38412, Pt. 9
Crustacea	EC50	Daphnia magna > 1700 mg/l, 48 h EU C.2
Fish	LC50	Danio rerio > 210 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage 100 mg/l, 3 h OECD 209
<b>SODIUM SILICATE (CAS 1344-09-8)</b>		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Desmodesmus subspicatus > 345.4 mg/l, 72 h DIN 38412 Part 9
Crustacea	EC50	Daphnia magna 1700 mg/l, 48 h EU C.2
Fish	LC50	Danio rerio 1108 mg/l, 96 h OECD 203
Other	EC0	Pseudomonas putida 3454 mg/l, 30 min DIN 38412 Part 27

\* Estimates for product may be based on additional component data not shown.

#### Persistence and degradability

##### Biodegradability

###### Percent degradation (Aerobic biodegradation)

MINERAL OIL

31 % OECD 301 F

Result: Not Readily Biodegradable

Result: Not expected to bioaccumulate

POTASSIUM PERSULFATE

###### Percent degradation (Aerobic biodegradation-ready)

CITRIC ACID

97 %

Result: Readily Biodegradable

Test Duration: 28 d

#### Bioaccumulative potential

##### Bioaccumulation

CITRIC ACID

Result: Bioaccumulation is unlikely.

##### Mobility in soil

No data available.

##### Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

#### Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Local disposal regulations

Dispose in accordance with all applicable regulations.

#### Hazardous waste code

Not regulated.

#### Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### General information

U.S. Department of Transportation - Approval CA2018070507

#### DOT

##### FINISHED GOODS

###### UN number

UN3230

###### UN proper shipping name

SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE), Limited Quantity

###### Class

4.1

###### Packing group

Not applicable.

**Transport hazard class(es)**  
Label(s) Limited Quantity  
**Packaging exceptions** None  
**LTD QTY Net Inner Capacity** 1.0 kg

**BULK**

**UN number** UN3230  
**UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)  
**Class** 4.1  
**Packing group** Not applicable.  
**Transport hazard class(es)**  
Label(s) 4.1  
**Packaging non bulk** 224

**IATA**

**FINISHED GOODS**

**UN number** UN3230  
**UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)  
**Class** 4.1  
**Packing group** Not applicable.  
**ERG Number** 3L  
**Special Provisions** A20,A802

**BULK**

**UN number** UN3230  
**UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)  
**Class** 4.1  
**Packing group** Not applicable.  
**ERG Number** 3L  
**Special Provisions** A20,A802

**IMDG**

**FINISHED GOODS**

**UN number** UN3230  
**UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE), Limited Quantity  
**Class** 4.1  
**Packing group** Not applicable.  
**Environmental Hazards**  
**Marine pollutant** No.  
**Transport hazard class(es)**  
Label(s) Limited Quantity  
**EmS** F-J, S-G  
**LTD QTY Net Inner Capacity** 500 g

**BULK**

**UN number** UN3230  
**UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)  
**Class** 4.1  
**Packing group** Not applicable.  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-J, S-G

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

