

1. Identification

Product identifier REDKEN FLASH LIFT 9 LEVEL BONDER INSIDE BLEACH

Other means of identification

SDS number 41-23-0000025

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

Physical hazards	Self-reactive substances and mixtures	Type F
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	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
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Heating may cause a fire. Harmful if swallowed. Causes severe skin burns and eye damage. 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. Do not breathe 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/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

Response

If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Wash contaminated clothing 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	41.6
SODIUM METASILICATE		6834-92-0	14.5
AMMONIUM PERSULFATE		7727-54-0	11.6
SODIUM SILICATE		1344-09-8	4.37
MINERAL OIL		8042-47-5	4
CITRIC ACID		5949-29-1	3.64
UREA		57-13-6	2.5

*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. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. 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 fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Heating may cause a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe 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.
Methods and materials for containment and cleaning up	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. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. 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.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	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 breathe dust. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. 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.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. 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/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
AMMONIUM PERSULFATE (CAS 7727-54-0)	TWA	0.1 mg/m3	
MINERAL OIL (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
POTASSIUM PERSULFATE (CAS 7727-21-1)	TWA	0.1 mg/m3	

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.

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
UREA (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Applicable for industrial settings only. Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection**Hand protection**

Applicable for industrial settings only. Wear appropriate chemical resistant gloves.

Other

Applicable for industrial settings only. Wear appropriate chemical resistant clothing.

Respiratory protection

Applicable for industrial settings only. 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.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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****Physical state**

Solid.

Form

Powder.

Color

Light blue.

Odor

Not available.

Odor threshold

Not available.

pH

Not applicable.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	10 - 10.6 (1%)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Combustible material.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing.

Information on toxicological effects

Acute toxicity	Harmful if swallowed.
----------------	-----------------------

Product	Species	Test Results
REDKEN FLASH LIFT 9 LEVEL BONDER INSIDE BLEACH		
<u>Acute</u>		
Dermal		
ATEmix		12860 mg/kg
Inhalation		
<i>Dust</i>		
ATEmix		21.88 mg/l
Oral		
ATEmix		1317 mg/kg

Components	Species	Test Results
AMMONIUM PERSULFATE (CAS 7727-54-0)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg > 2000 mg/kg bw OECD 402

Components	Species	Test Results
Inhalation		
LC50	Rat	> 2.95 mg/l, 4 h EPA OPP 81-3
Oral		
LD50	Rat	700 mg/kg bw OECD 401
CITRIC ACID (CAS 5949-29-1)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Mouse	5400 mg/kg
	Rat	6730 mg/kg
MINERAL OIL (CAS 8042-47-5)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg OECD 402
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 5 mg/L air, 4 h OECD 403
Oral		
LD50	Rat	> 5000 mg/kg OECD 401
POTASSIUM PERSULFATE (CAS 7727-21-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 10000 mg/kg
Inhalation		
LC50	Rat	> 42.9 mg/l, 1 h
Oral		
LD50	Rat	1130 mg/kg OECD 401
SODIUM METASILICATE (CAS 6834-92-0)		
<u>Acute</u>		
Dermal		
LD50	Rat	> 5000 mg/kg Based on test data for structurally similar materials.
Inhalation		
LC50	Rat	> 2.06 mg/l, 4.4 h Based on test data for structurally similar materials.
Oral		
LD50	Rat	1152 mg/kg
SODIUM SILICATE (CAS 1344-09-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 5000 mg/kg bw EPA OPPTS 870.1200
Inhalation		
LC50	Rat	> 2.06 mg/L air, 4.4 h EPA OPPTS 870.1300
Oral		
LD50	Rat	3400 mg/kg bw OECD 401
UREA (CAS 57-13-6)		
<u>Acute</u>		
Oral		
LD50	Rat	8471 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

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
UREA	OECD 404 Result: Not Irritating Species: Rabbit
CITRIC ACID	OECD 404 Result: Slightly Irritating Species: Rabbit
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
UREA	OECD 405 Result: Slightly 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
-------------	--

Skin sensitization

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

UREA

Result: Not Sensitizing

Species: Human

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

UREA

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 1910.1001-1052)

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

UREA

> 1000 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

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

Reproductivity
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/m ³ 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
AMMONIUM PERSULFATE	10.3 mg/m ³ , 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. The reference to any animal testing for individual constituents mentioned in this document is based on public, third-party data.

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)			
Aquatic			
Acute			
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

Components		Species	Test Results
<i>Chronic</i>			
Algae	NOEC	Desmodesmus subspicatus	32 mg/l, 72 h OECD 201
CITRIC ACID (CAS 5949-29-1)			
Aquatic			
<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)			
Aquatic			
<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
SODIUM METASILICATE (CAS 6834-92-0)			
Aquatic			
<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
SODIUM SILICATE (CAS 1344-09-8)			
Aquatic			
<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
UREA (CAS 57-13-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3910 mg/l, 48 hours
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	> 10000 mg/l, 24 h DIN 38412, 11
Fish	LC50	Leuciscus idus	> 6810 mg/l, 96 h

Persistence and degradability

Biodegradability

Percent degradation (Aerobic biodegradation)

MINERAL OIL

31 % OECD 301 F

Result: Not Readily Biodegradable

POTASSIUM PERSULFATE

Result: Not expected to bioaccumulate

UREA

96 % OECD 302 B

Result: Inherently biodegradable.

Test Duration: 16 d

Percent degradation (Aerobic biodegradation-ready)

CITRIC ACID

97 %

Result: Readily Biodegradable

Test Duration: 28 d

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

CITRIC ACID

-1.64

UREA

-1.59 OECD 107

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

This product is a reactivity characteristic (D003) RCRA hazardous waste when intended for disposal.

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**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

II

Transport hazard class(es)**Label(s)**

Limited Quantity

Packaging exceptions

None

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

II

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

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

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.

Toxic Substances Control Act (TSCA)

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 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No (Exempt)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

16. Other information, including date of preparation or last revision

Issue date	07-12-2022
Version #	01
NFPA ratings	Health: 3 Flammability: 0 Instability: 1

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.