



# 1. Identification

Product identifier	MATRIX LIGHT MASTER HIGH RISER LEVEL 9 PRE-BONDED	
Other means of identification		
SDS number	41-23-0000031	
Recommended use	Personal care product used for cosmetic effect.	
<b>Recommended restrictions</b>	None known.	
Manufacturer/Importer/Supplier	/Distributor information	
US Address:	L'Oreal USA Products, Inc	
oo Address.	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	Туре 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.	

# **OSHA** defined hazards

Label elements



Signal word Hazard statement Danger

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	Туре	Value	Form
MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
US. Workplace Environme	ental Exposure Level (WEEL) Guides		
Components	Туре	Value	Form
UREA (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.
Biological limit values	No biological exposure limits noted for th	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 measure	s, such as personal protective equipment	t	
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.		sistant 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	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or expl	osive 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	No hazardous decomposition products are known.

# 11. Toxicological information

products

## 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
MATRIX LIGHT MASTER	R HIGH RISER LEVEL 9 PRE-BONDED	
Acute		
Dermal		
ATEmix		12860 mg/kg
<b>Inhalation</b> <i>Dust</i> ATEmix		21.88 mg/l
Oral		21.00 mg/
ATEmix		1317 mg/kg
Components	Species	Test Results
AMMONIUM PERSULFA	TE (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 5949-2	9-1)	
<u>Acute</u>		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Mouse	5400 mg/kg
	Rat	6730 mg/kg
		or oo mgmg
MINERAL OIL (CAS 8042-4	+7-5)	
<u>Acute</u>		
Dermal	Data	
LD50	Rabbit	> 2000 mg/kg OECD 402
Inhalation		
Aerosol		
LC50	Rat	> 5 mg/L air, 4 h OECD 403
Oral		
LD50	Rat	> 5000 mg/kg OECD 401
POTASSIUM PERSULFAT	E (CAS 7727-21-1)	
Acute		
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		Structurary Similar matchais.
LC50	Rat	> 2.06 mg/l 4.4 h Record on toot data for
LC30	Rat	> 2.06 mg/l, 4.4 h Based on test data for structurally similar materials.
Oral		,
LD50	Rat	1152 mg/kg
		1102 mg/kg
SODIUM SILICATE (CAS 1	344-03-0)	
<u>Acute</u>		
Dermal	Dabbit	
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
0		070.1000
Oral	Det	
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 - Ski	n	
SODIUM METASILIC	ATE	OECD 404
		Result: Corrosive
		Species: Rabbit
AMMONIUM PERSU	LFATE	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 PERSU		Result: Irritating Species: Human
	O	Species: Human
Serious eye damage/eye irritation	Causes serious eye damage.	
Irritation Corrosion - Eye		
SODIUM METASILIC	AIE	IRE Result: Corrosive
		Species: In vitro
AMMONIUM PERSU	ΙΕΔΤΕ	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 PERSU	ILFATE	Result: Irritating
		Species: Human
Respiratory or skin sensitization		
Respiratory sensitization		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 rea	ction.
Sensitization		
AMMONIUM PERSU	LFATE	OECD 406
		Result: Sensitizing
		Species: Guinea pig
SODIUM SILICATE		OECD 429
		Result: Not Sensitizing
		Species: Mouse
POTASSIUM PERSU	ILFAIE	OECD 429
		Result: Sensitizing Species: Mouse
Skin sensitization		อрестез. เพบนระ
CITRIC ACID		OECD 406
		Result: Not Sensitizing
		Species: Guinea pig

Ski	in sensitization		
MINERAL OIL			OECD 406
			Result: Not Sensitizing Species: Guinea pig
SODIUM METASILICATE		CATE	OECD 429
			Result: Not Sensitizing
	POTASSIUM PERS		Species: Mouse OECD 429
	FUTASSIUM FERS	OUFATE	Result: Sensitizing
			Species: Guinea pig
	UREA		Result: Not Sensitizing Species: Human
Gorm coll n	nutagenicity	Due to partial or complete lac	k of data the classification is not possible.
		Due to partial of complete lac	
IVIU	itagenicity CITRIC ACID		Result: In vitro and in vivo tests did not show mutagenic
			effects.
	SODIUM METASILI		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.
		ULFATE	Result: In vitro tests did not show mutagenic effects
	MINERAL OIL POTASSIUM PERS	ULFATE	Result: In vitro tests did not show mutagenic effects Result: In vitro tests did not show mutagenic effects
	UREA		Result: In vitro tests did not show mutagenic effects
Carcinogen	nicity	Not classifiable as to carcinog classification is not possible.	enicity to humans. Due to partial or complete lack of data the
IARC M	Ionographs. Overall	Evaluation of Carcinogenicity	
	NERAL OIL (CAS 804		3 Not classifiable as to carcinogenicity to humans.
OSHA S	Specifically Regulate	ed Substances (29 CFR 1910.1	
	t regulated.		
US Nat	tional Toxicology Pr	ogram (NTD) Donort on Caroin	
		ogram (NTP) Report on Carcin	ogens
Not	t listed.		
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b>		k of data the classification is not possible.
No <sup>:</sup> Reproducti	t listed. ve toxicity velopmental effects		k of data the classification is not possible.
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b>		
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
No <sup>:</sup> Reproducti	t listed. ve toxicity velopmental effects	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 200 mg/kg bw/d OECD 414, No effects on development
No <sup>:</sup> Reproducti	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL
No Reproducti De	t listed. <b>ve toxicity</b> <b>velopmental effects</b> UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 200 mg/kg bw/d OECD 414, No effects on development
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 159 mg/kg bw/d
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 159 mg/kg bw/d Result: NOAEL
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM METASILI	Due to partial or complete lac	<ul> <li>k of data the classification is not possible.</li> <li>&gt; 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Mouse</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d Result: NOAEL Species: Rat</li> </ul>
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 159 mg/kg bw/d Result: NOAEL Species: Rat > 159 mg/kg bw/d, Oral Result: NOAEL
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM METASILI SODIUM SILICATE	Due to partial or complete lac	k of data the classification is not possible. > 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat > 200 mg/kg bw/d Result: NOAEL Species: Mouse > 200 mg/kg bw/d Result: NOAEL Species: Rat > 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat > 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat > 295 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat > 159 mg/kg bw/d Result: NOAEL Species: Rat > 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM METASILI	Due to partial or complete lac	<ul> <li>k of data the classification is not possible.</li> <li>&gt; 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Mouse</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421</li> </ul>
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM METASILI SODIUM SILICATE	Due to partial or complete lac	<ul> <li>k of data the classification is not possible.</li> <li>&gt; 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Mouse</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> </ul>
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM METASILI SODIUM SILICATE	Due to partial or complete lac	<ul> <li>k of data the classification is not possible.</li> <li>&gt; 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Mouse</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d, No effects on fertility</li> </ul>
No Reproducti De	t listed. ve toxicity velopmental effects UREA SODIUM METASILI SODIUM SILICATE AMMONIUM PERS CITRIC ACID MINERAL OIL productivity SODIUM SILICATE AMMONIUM PERS	Due to partial or complete lac	<ul> <li>k of data the classification is not possible.</li> <li>&gt; 1000 mg/kg bw/d OECD 414 Result: NOAEL Species: Rat</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Mouse</li> <li>&gt; 200 mg/kg bw/d Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 295 mg/kg bw/d, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 5000 mg/kg bw/d OECD 414, No effects on development Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 159 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d, Oral Result: NOAEL Species: Rat</li> <li>&gt; 250 mg/kg bw/d OECD 421 Result: NOAEL Species: Rat</li> </ul>

Reproductivity
MINERAL OIL

	Opeoles. Nat
Specific target organ toxicity - single exposure	May cause respiratory irritation.
SODIUM METASILICATE	Result: Irritating
SODIUM SILICATE	Result: Irritating
POTASSIUM PERSULFATE	Result: Irritating
FUTASSIUMFERSULFATE	Species: Human
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
MINERAL OIL	> 2000 mg/kg bw/d OECD 411, Dermal
MINERAL OIL	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
	10.3 mg/m <sup>3</sup> , Inhalation
AMMONIUM PERSULFATE	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
Achieve hours	
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Further information	May cause allergic respiratory and skin reactions. The reference to any animal testing for

# 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.

individual constituents mentioned in this document is based on public, third-party data.

Components		Species	Test Results	
AMMONIUM PERSUL	FATE (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
Chronic				
Algae	NOEC	Desmodesmus	s subspicatus	32 mg/l, 72 h OECD 201
CITRIC ACID (CAS 59	49-29-1)			
Aquatic				
Acute				
Algae	LOEC	Microcystis ae	ruginosa	80 mg/l, 7 d
Crustacea	EC50	Daphnia magr	a	1535 mg/l, 24 h
Fish	LC50	Leuciscus idus	3	440 - 760 mg/l, 96 h
Other	NOAEC	Pseudomonas	putida	18 h
MINERAL OIL (CAS 80	042-47-5)			
Aquatic				
Acute				
Algae	NOEL	Pseudokirchne	eriella subcapitata	> 100 mg/l, 72 h OECD 201
Crustacea	EL50	Daphnia magr	na	> 100 mg/l, 48 h OECD 202
Fish	LL50	Oncorhynchus	s mykiss	> 100 mg/l, 96 h OECD 203
Chronic				
Crustacea	NOEC	Daphnia magr	a	10 mg/l, 21 d OECD 211
SODIUM METASILICA	TE (CAS 6834-92-	0)		
Aquatic				
Acute				
Algae	EC50	Pseudokirchne	eriella subcapitata	> 207 mg/l, 72 h DIN 38412, Pt. 9
Crustacea	EC50	Daphnia magr	a	> 1700 mg/l, 48 h EU C.2
Fish	LC50	Danio rerio		> 210 mg/l, 96 h OECD 203
Other	EC50	Activated slud	ge of a predominantly	100 mg/l, 3 h OECD 209
SODIUM SILICATE (C	AS 1344-09-8)			
Aquatic	,			
Acute				
Algae	EC50	Desmodesmus	s subspicatus	> 345.4 mg/l, 72 h DIN 38412 Part 9
Crustacea	EC50	Daphnia magr	na	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 2
UREA (CAS 57-13-6)				
Aquatic				
Crustacea	EC50	Water flea (Da	iphnia magna)	3910 mg/l, 48 hours
Acute		``	,	<b>-</b>
Crustacea	EC50	Daphnia magr	a	> 10000 mg/l, 24 h DIN 38412, 11
Fish	LC50	Leuciscus idus		> 6810 mg/l, 96 h
sistence and degradal	bility			
Biodegradability	tion (Aerobic biod	aradation)		
MINERAL OIL	מטוע סומטופהן ווסט	-gradation)	31 % OECD 301 F	
			Result: Not Readily Bi	
POTASSIUM PER UREA	SULFATE		Result: Not expected t 96 % OECD 302 B	o bioaccumulate
UNEA			Result: Inherently biod	legradable.
_			Test Duration: 16 d	-
Percent degradat CITRIC ACID	tion (Aerobic biod	egradation-ready)	97 %	
			97 % Result: Readily Biodeo	gradable
			Test Duration: 28 d	
accumulative potentia	l.			

Partition coefficient n-c	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 considera	ations

#### Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions** contents/container in accordance with local/regional/national/international regulations. Local disposal regulations Dispose in accordance with all applicable regulations. This product is a reactivity characteristic (D003) RCRA hazardous waste when intended for Hazardous waste code disposal. Dispose of in accordance with local regulations. Empty containers or liners may retain some Waste from residues / unused product residues. This material and its container must be disposed of in a safe manner (see: products 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

501			
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	151		
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.		
Transport hazard class(es)			
Label(s)	4.1		
Packaging non bulk	224		
ΙΑΤΑ			
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),		
- F - F - S	Limited Quantity		

01	4.1
Class Packing group	4. i Not applicable.
Environmental Hazards	Not applicable.
Marine pollutant	No.
Transport hazard class(es)	
Label(s)	Limited Quantity
EmS	F-J, S-G
LTD QTY Net Inner Capacity	
BULK	<b>.</b>
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
oo leacht regulations	Standard, 29 CFR 1910.1200.
Toxic Substances Control A	ct (TSCA)
	ort Notification (40 CFR 707, Subpt. D)
Not regulated.	
•	
CERCLA Hazardous Substan	nce List (40 CFR 302.4)
Not listed.	no notification
SARA 304 Emergency releas	
Not regulated.	d Substances (29 CFR 1910.1001-1052)
	1 Substances (29 CFR 1910.1001-1052)
Not regulated.	
-	authorization Act of 1986 (SARA)
SARA 302 Extremely hazard	ous substance
Not listed.	
SARA 311/312 Hazardous	No (Exempt)
chemical	
SARA 313 (TRI reporting)	
Not regulated.	
Other federal regulations	
•	112 Hazardous Air Pollutants (HAPs) List
Not regulated.	
	112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.	(
Safe Drinking Water Act	Not regulated.
(SDWA)	not rogalatoa.
16. Other information, incl	uding 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.