

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

<b>Trade name or designation of the mixture</b>	L'ORÉAL PROFESSIONNEL BLOND STUDIO 9 BONDER INSIDE MULTI-TECHNIQUES LIGHTENING POWDER
<b>Synonyms</b>	None.
<b>SDS number</b>	41-23-0000027
<b>Product code</b>	1240901 M
<b>Issue date</b>	12-22-2021
<b>Version number</b>	01

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

<b>Identified uses</b>	Personal care product used for cosmetic effect.
<b>Uses advised against</b>	None known.

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer**

<b>Company name</b>	Productos Capilares L'Oreal SA
<b>Address</b>	Poligono Industrial de Villalonquejar - Calle López Bravo - 78 Apartado 517 Burgos 09001 Spain
<b>Telephone</b>	+ 1 732 499 2745
<b>e-mail</b>	nacorpeuropesdsrequest@loreal.com

**1.4. Emergency telephone number**

<b>Emergency Phone Number:</b>	+ 34 947 258 300
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**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Regulation (EC) No 1272/2008 as amended**

**Physical hazards**

Self-reactive substances and mixtures	Type F	H242 - Heating may cause a fire.
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**Health hazards**

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Respiratory sensitization	Category 1	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization	Category 1	H317 - May cause an allergic skin reaction.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

**Hazard summary**

Heating may cause a fire. Causes serious eye damage. Harmful if swallowed. Causes skin irritation. May cause irritation to the respiratory system. Exposure to powder or dusts may be irritating to eyes, nose and throat. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Occupational exposure to the substance or mixture may cause adverse health effects. This is a consumer care product that is safe for consumers when used according to the label directions. Like many consumer products, a small number of individuals may experience reactions such as redness, rash and / or swelling upon prolonged or repeated skin contact or eye contact.

**2.2. Label elements**

**Label according to Regulation (EC) No. 1272/2008 as amended**

**Contains:** AMMONIUM PERSULFATE, POTASSIUM PERSULFATE, SODIUM LAURYL SULFATE, SODIUM METASILICATE, SODIUM SILICATE

**Hazard pictograms**

**Signal word** Danger

**Hazard statements**

H242	Heating may cause a fire.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

**Precautionary statements****Prevention**

P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234	Keep only in original packaging.
P235	Keep cool.
P260	Do not breathe dust.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.

**Response**

P101	If medical advice is needed, have product container or label at hand.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use appropriate media to extinguish.

**Storage**

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P411	Store at temperatures not exceeding 25°C / 77°F.
P420	Store separately.

**Disposal**

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Supplemental label information**

62,02% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 90,28% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

**2.3. Other hazards**

Not a PBT or vPvB substance or mixture.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
POTASSIUM PERSULFATE	41,6	7727-21-1 231-781-8	01-2119495676-19	016-061-00-1	

**Classification:** Ox. Sol. 3;H272, Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Resp. Sens. 1;H334, STOT SE 3;H335

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
SODIUM SILICATE	16,72	1344-09-8 215-687-4	01-2119448725-31	-	
<b>Classification:</b>	Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335				
AMMONIUM PERSULFATE	11,54	7727-54-0 231-786-5	01-2119495973-19	016-060-00-6	
<b>Classification:</b>	Ox. Sol. 3;H272, Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Irrit. 2;H319, Acute Tox. 4;H332, Resp. Sens. 1;H334, STOT SE 3;H335				
SODIUM METASILICATE	5,64	6834-92-0 229-912-9	01-2119449811-37	014-010-00-8	
<b>Classification:</b>	Met. Corr. 1;H290, Acute Tox. 4;H302, Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335				
CITRIC ACID	3,64	5949-29-1 201-069-1	01-2119457026-42	-	
<b>Classification:</b>	Eye Irrit. 2;H319				
SODIUM LAURYL SULFATE	1	85586-07-8 287-809-4	01-2119489463-28	-	
<b>Classification:</b>	Acute Tox. 4;H302, Skin Irrit. 2;H315, Eye Dam. 1;H318, Aquatic Chronic 3;H412				

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**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.

### 4.1. Description of 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.

**4.2. Most important symptoms and effects, both 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.

**4.3. Indication of any 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.

## SECTION 5: Firefighting measures

**General fire hazards** Heating may cause a fire.

### 5.1. Extinguishing media

**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.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

#### Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Special fire fighting procedures

Use water spray to cool unopened containers.

#### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

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. 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.

#### For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

### 6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

### 6.3. Methods and material 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.

### 6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

### 7.1. 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 this material in contact with eyes. Do not taste or swallow. 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.

### 7.2. 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.

### 7.3. Specific end use(s)

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Spain. Occupational Exposure Limits Components

Components	Type	Value	Form
AMMONIUM PERSULFATE (CAS 7727-54-0)	TWA	0,1 mg/m3	
MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
POTASSIUM PERSULFATE (CAS 7727-21-1)	TWA	0,1 mg/m3	

#### Biological limit values

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

#### Recommended monitoring procedures

Follow standard monitoring procedures.

#### Derived no effect levels (DNELs)

Not available.

**Predicted no effect concentrations (PNECs)** Not available.

## 8.2. Exposure controls

### 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. Provide eyewash station and safety shower.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the 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. Wear respirator with dust filter. Dust & vapor respirator.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

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.

### Environmental exposure controls

Not available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

##### Physical state

Solid.

##### Form

Powder.

##### Color

Blue. Shaded

#### Odor

Not available.

#### Odor threshold

Not available.

#### pH

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 explosive limits

##### Flammability limit - lower (%)

Not available.

##### Flammability 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.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

## 9.2. Other information

pH in aqueous solution	9,7 - 10,3 (1%)
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## SECTION 10: Stability and reactivity

10.1. Reactivity	Keep away from combustible material.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
10.5. Incompatible materials	Combustible material.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### 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** 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.

### 11.1. Information on toxicological effects

**Acute toxicity** Harmful if swallowed.

Product	Species	Test Results
L'ORÉAL PROFESSIONNEL BLOND STUDIO 9 BONDER INSIDE MULTI-TECHNIQUES LIGHTENING POWDER		

#### Acute

##### **Inhalation**

*Dust*

ATEmix	22,9 mg/l
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##### **Oral**

ATEmix	1451 mg/kg
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Components	Species	Test Results
AMMONIUM PERSULFATE (CAS 7727-54-0)		

#### Acute

##### **Dermal**

LD50	Rat	> 2000 mg/kg bw OECD 402
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##### **Inhalation**

LC50	Rat	> 2,95 mg/l, 4 h EPA OPP 81-3
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##### **Oral**

LD50	Rat	700 mg/kg bw OECD 401
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CITRIC ACID (CAS 5949-29-1)

#### Acute

##### **Dermal**

LD50	Rat	> 2000 mg/kg, 24 Hours
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##### **Oral**

LD50	Mouse	5400 mg/kg
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	Rat	6730 mg/kg
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Components	Species	Test Results
<b>POTASSIUM PERSULFATE (CAS 7727-21-1)</b>		
<b><u>Acute</u></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
<b>SODIUM LAURYL SULFATE (CAS 85586-07-8)</b>		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg OECD 402
<b>Oral</b>		
LD50	Rat	1800 mg/kg
<b>SODIUM METASILICATE (CAS 6834-92-0)</b>		
<b><u>Acute</u></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
<b>SODIUM SILICATE (CAS 1344-09-8)</b>		
<b><u>Acute</u></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
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Irritation Corrosion - Skin</b>		
SODIUM METASILICATE		OECD 404 Result: Corrosive Species: Rabbit
AMMONIUM PERSULFATE		OECD 404 Result: Irritating Species: Rabbit
SODIUM LAURYL SULFATE		OECD 404 Result: Irritating Species: Rabbit
SODIUM SILICATE		OECD 404 Result: Irritating Species: Rabbit
CITRIC ACID		OECD 404 Result: Slightly Irritating Species: Rabbit
POTASSIUM PERSULFATE		OECD 404 Result: Irritating Species: Human
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Irritation Corrosion - Eye</b>		
SODIUM METASILICATE		IRE Result: Corrosive Species: In vitro

<b>Irritation Corrosion - Eye</b>		
SODIUM LAURYL SULFATE		OECD 405 Result: Corrosive Species: Rabbit
AMMONIUM PERSULFATE		OECD 405 Result: Irritating Species: Rabbit
CITRIC ACID		OECD 405 Result: Irritating Species: Rabbit
SODIUM SILICATE		Result: Corrosive Species: Rabbit
POTASSIUM PERSULFATE		Result: Irritating Species: Human
<b>Respiratory sensitization</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
AMMONIUM PERSULFATE		Result: Sensitizing Species: Human
POTASSIUM PERSULFATE		Result: Sensitizing Species: Human
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Sensitization</b>		
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
<b>Skin sensitization</b>		
CITRIC ACID		OECD 406 Result: Not Sensitizing Species: Guinea pig
SODIUM LAURYL SULFATE		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
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Mutagenicity</b>		
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
POTASSIUM PERSULFATE		Result: In vitro tests did not show mutagenic effects
SODIUM LAURYL SULFATE		Result: In vitro tests did not show mutagenic effects
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans. Due to partial or complete lack of data the classification is not possible.	
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Developmental effects</b>		
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



**Developmental effects**  
SODIUM LAURYL SULFATE

250 mg/kg bw/d OECD 414  
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

SODIUM LAURYL SULFATE

2000 mg/kg bw/d OECD 422  
Result: NOAEL  
Species: Rat

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

SODIUM METASILICATE  
SODIUM SILICATE  
POTASSIUM PERSULFATE

Result: Irritating  
Result: Irritating  
Result: Irritating  
Species: Human

**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible.

SODIUM METASILICATE  
  
AMMONIUM PERSULFATE  
  
POTASSIUM PERSULFATE  
  
SODIUM SILICATE  
  
CITRIC ACID  
  
AMMONIUM PERSULFATE  
  
SODIUM LAURYL SULFATE

> 227 mg/kg bw/d OECD 408, Oral  
Result: NOAEL  
Species: Rat  
Test Duration: 90 d  
10,3 mg/m<sup>3</sup>, Inhalation  
Result: NOAEC  
Species: Rat  
Test Duration: 90 d  
131,5 mg/kg bw/d OECD 407  
Result: NOAEL  
Species: Rat  
Test Duration: 28 d  
2400 mg/kg bw/d OECD 407  
Result: NOAEL  
Species: Rat  
Test Duration: 28 d  
4000 mg/kg bw/d, Oral  
Result: NOAEL  
Species: Rat  
Test Duration: 10 d  
41,1 mg/kg bw/d OECD 407, Oral  
Result: NOAEL  
Species: Rat  
Test Duration: 28 d  
488 mg/kg bw/d OECD 408  
Result: NOAEL  
Species: Rat  
Test Duration: 90 d

**Aspiration hazard** Due to partial or complete lack of data the classification is not possible.

**Mixture versus substance information** No information available.

**Other 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.

## SECTION 12: Ecological information

**12.1. Toxicity** Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components	Species		Test Results
<b>AMMONIUM PERSULFATE (CAS 7727-54-0)</b>			
<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
<b>CITRIC ACID (CAS 5949-29-1)</b>			
<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
<b>SODIUM LAURYL SULFATE (CAS 85586-07-8)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	> 20 mg/l, 72 h EU C.3
Crustacea	EC50	Daphnia magna	4,7 mg/l, 48 h EU C.2
Fish	LC50	Oncorhynchus mykiss	3,6 mg/l, 96 h OECD 203
Other	EC10	Pseudomonas putida	1084 mg/l, 16 h DIN 38412, 8
<i>Chronic</i>			
Algae	NOEC	Desmodesmus subspicatus	0,6 mg/l, 72 h EU C.3
Crustacea	NOEC	Daphnia magna	0,508 mg/l, 7 d
Fish	NOEC	Pimephales promelas	0,11 - 0,35 mg/l, 34 d OECD 210
<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

## 12.2. Persistence and degradability

### Biodegradability

#### Percent degradation (Aerobic biodegradation)

POTASSIUM PERSULFATE  
SODIUM LAURYL SULFATE

Result: Not expected to bioaccumulate  
75,7 % OECD 301 B  
Result: Readily Biodegradable  
Test Duration: 28 d

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

CITRIC ACID

97 %  
Result: Readily Biodegradable  
Test Duration: 28 d

## 12.3. Bioaccumulative potential

**Partition coefficient  
n-octanol/water (log Kow)**  
SODIUM LAURYL SULFATE

< -2,42

- 12.4. Mobility in soil** No data available.
- 12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.
- 12.6. 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.
- 12.7. Additional information** The reference to any animal testing for individual constituents mentioned in this document is based on public, third-party data.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Residual waste** 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.
- EU waste code** The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
- Disposal methods/information** 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.
- Special precautions** Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

#### FINISHED GOODS

- 14.1. UN number** UN3230
- 14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE), Limited Quantity
- 14.3. Transport hazard class(es)**
- Class** 4.1
  - Label(s)** Limited Quantity
  - Hazard No. (ADR)** 40
  - Tunnel restriction code** D
- 14.4. Packing group** Not applicable.
- 14.5. Environmental hazards** No
- 14.6. Special precautions for user** Not available.

**LTD QTY Net Inner Capacity** 500 g

### BULK

- 14.1. UN number** UN3230
- 14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)
- 14.3. Transport hazard class(es)**
- Class** 4.1
  - Label(s)** 4.1
  - Hazard No. (ADR)** 40
  - Tunnel restriction code** D
- 14.4. Packing group** Not applicable.
- 14.5. Environmental hazards** No.
- 14.6. Special precautions for user** Not available.

### IATA

#### FINISHED GOODS

- 14.1. UN number** UN3230
- 14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)
- 14.3. Transport hazard class(es)**
- Class** 4.1
- 14.4. Packing group** Not applicable.
- 14.5. Environmental hazards** No.
- ERG Code** 3L

**14.6. Special precautions for user** Not available.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**BULK**

**14.1. UN number** UN3230

**14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)

**14.3. Transport hazard class(es)**

**Class** 4.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards** No.

**ERG Code** 3L

**14.6. Special precautions for user** Not available.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**FINISHED GOODS**

**14.1. UN number** UN3230

**14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE), Limited Quantity

**14.3. Transport hazard class(es)**

**Class** 4.1

**Label(s)** Limited Quantity

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards**

**Marine pollutant** No.

**EmS** F-J, S-G

**14.6. Special precautions for user** Not available.

**LTD QTY Net Inner Capacity** 500 g

**BULK**

**14.1. UN number** UN3230

**14.2. UN proper shipping name** SELF-REACTIVE SOLID TYPE F (POTASSIUM PERSULFATE, AMMONIUM PERSULFATE)

**14.3. Transport hazard class(es)**

**Class** 4.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards**

**Marine pollutant** No.

**EmS** F-J, S-G

**14.6. Special precautions for user** Not available.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**  
Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**  
Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**  
Not listed.

#### Authorizations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**  
Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**  
SODIUM METASILICATE (CAS 6834-92-0)  
SODIUM SILICATE (CAS 1344-09-8)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**  
Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**  
AMMONIUM PERSULFATE (CAS 7727-54-0)  
POTASSIUM PERSULFATE (CAS 7727-21-1)

#### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

#### List of abbreviations

Not available.

#### References

Not available.

#### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### Full text of any H-statements not written out in full under Sections 2 to 15

H272 May intensify fire; oxidizer.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H412 Harmful to aquatic life with long lasting effects.

#### Revision information

None.

#### Training information

Follow training instructions when handling this material.

#### 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.

This document is communicated even though this product does not legally require an SDS. The purpose of this information is to allow the operators concerned to take, if necessary, the measures they deem appropriate, with regard to the storage, handling and transport of products, in order to guarantee the protection of their employees.