

# SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by  
UK REACH Regulations SI 2019/758



## APS-5F

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Date of last issue: 23.03.2023  |
| 1.3     | 12.07.2024     | 600000000016 | Date of first issue: 26.09.2022 |

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

#### 1.1 Product identifier

Trade name : APS-5F

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

Use of the Sub-  
stance/Mixture : Oxidizing agents, polymerisation initiators

#### 1.3 Details of the supplier of the safety data sheet

Company : United Initiators GmbH  
Dr.-Gustav-Adolph-Str. 3  
82049 Pullach

Telephone : +49 / 89 / 74422 – 0

E-mail address of person  
responsible for the SDS : contact@united-in.com

#### 1.4 Emergency telephone number

+44 1235 239670

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK  
SI 2019/720, and UK SI 2020/1567)**

|  |  |
|--|--|
| Oxidizing solids, Category 3   | H272: May intensify fire; oxidizer.  |
| Acute toxicity, Category 4   | H302: Harmful if swallowed.  |
| Skin irritation, Category 2  | H315: Causes skin irritation.  |
| Eye irritation, Category 2   | H319: Causes serious eye irritation.   |
| Respiratory sensitisation, Category 1  | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin sensitisation, Category 1   | H317: May cause an allergic skin reaction.                                       |
| Specific target organ toxicity - single exposure, Category 3, Respiratory system | H335: May cause respiratory irritation.  |

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### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

Hazard pictograms :



Signal word : Danger

Hazard statements :

- H272 May intensify fire; oxidizer.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.

Precautionary statements :

#### **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P220 Keep/ Store away from clothing/ combustible materials.  
P261 Avoid breathing dust.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

#### **Response:**

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
P370 + P378 In case of fire: Use water spray to extinguish.

Hazardous components which must be listed on the label:  
Ammonium persulphate (CAS-No. 7727-54-0)

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  
May cause fire or explosion; strong oxidizer.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature : Persulphate  
Solid

#### Components

| Chemical name        | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number           | Classification   | Concentration<br>(% w/w) |
|----------------------|---|--|--------------------------|
| Ammonium persulphate | 7727-54-0<br>231-786-5<br>016-060-00-6<br>01-2119495973-19-0000 | Ox. Sol. 3; H272<br>Acute Tox. 4; H302<br>Skin Irrit. 2; H315<br>Eye Irrit. 2; H319<br>Resp. Sens. 1;<br>H334<br>Skin Sens. 1; H317<br>STOT SE 3; H335<br>(Respiratory system) | >= 95 - <= 100           |

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes immediately.  
Call a physician immediately.  
Never give anything by mouth to an unconscious person.  
If unconscious, place in recovery position and seek medical advice.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.  
Symptoms of poisoning may appear several hours later.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing

If inhaled : Administer oxygen if breathing is difficult or cyanosis is observed.  
If breathed in, move person into fresh air.  
If not breathing, give artificial respiration.  
Call a physician or poison control centre immediately.  
If unconscious, place in recovery position and seek medical advice.

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- Keep respiratory tract clear.
- In case of skin contact : If symptoms persist, call a physician.  
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Wash contaminated clothing before re-use.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Call a physician immediately.  
Rinse mouth thoroughly with water.  
Keep respiratory tract clear.  
If symptoms persist, call a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : sensitising effects
- Risks : Harmful if swallowed.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.

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

- Treatment : Treat symptomatically and supportively.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Foam  
Water spray jet
- Unsuitable extinguishing media : High volume water jet

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### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.  
Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Specific extinguishing methods : Do not use a solid water stream as it may scatter and spread fire.  
Remove undamaged containers from fire area if it is safe to do so.  
Use water spray to cool unopened containers.  
Suppress (knock down) gases/vapours/mists with a water spray jet.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use a water spray to cool fully closed containers.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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## SECTION 6: Accidental release measures

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

Personal precautions : Follow safe handling advice and personal protective equipment recommendations.  
Use personal protective equipment.  
Avoid dust formation.  
Avoid breathing dust.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Never return spills in original containers for re-use.  
Treat recovered material as described in the section "Disposal considerations".

### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform

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respective authorities.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.  
Clear spills immediately.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
To clean the floor and all objects contaminated by this material, use plenty of water.  
Soak up with inert absorbent material.  
Isolate waste and do not reuse.  
Non-sparking tools should be used.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on safe handling : Avoid formation of respirable particles.  
Protect from contamination.  
Protect from moisture.  
Do not swallow.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Take precautionary measures against static discharges.  
Never return any product to the container from which it was originally removed.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid confinement.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Smoking, eating and drinking should be prohibited in the application area.  
Wash thoroughly after handling.  
For personal protection see section 8.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not

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be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Keep away from combustible material. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Avoid contact with skin, eyes and clothing. Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep in a dry place. Observe label precautions. Store in accordance with the particular national regulations. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage : Never allow product to get in contact with water during storage.  
Keep away from combustible materials.  
Keep away from strong acids, bases, heavy metal salts and other reducing substances.

Recommended storage temperature : < 30 °C

Further information on storage stability : Stable under recommended storage conditions.

### 7.3 Specific end use(s)

Specific use(s) : For further information, refer to the product technical data sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL):

| Substance name       | End Use | Exposure routes | Potential health effects | Value       |
|----------------------|---------|-----------------|--------------------------|-------------|
| Ammonium persulphate | Workers | Inhalation      | Long-term local effects  | 0.824 mg/m3 |

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|--|-----------|--------------|----------------------------|-------------------|
|  | Workers   | Skin contact | Long-term systemic effects | 9.5 mg/kg bw/day  |
|  | Consumers | Inhalation   | Long-term local effects    | 0.421 mg/m3       |
|  | Consumers | Skin contact | Long-term systemic effects | 4.8 mg/kg bw/day  |
|  | Consumers | Ingestion    | Long-term systemic effects | 0.47 mg/kg bw/day |
|  | Consumers | Ingestion    | Acute systemic effects     | 1.41 mg/kg bw/day |

### Predicted No Effect Concentration (PNEC):

| Substance name       | Environmental Compartment | Value                         |
|----------------------|---------------------------|-------------------------------|
| Ammonium persulphate | Fresh water               | 0.518 mg/l                    |
|                      | Intermittent use/release  | 0.763 mg/l                    |
|                      | Marine water              | 0.052 mg/l                    |
|                      | Sewage treatment plant    | 3.6 mg/l                      |
|                      | Fresh water sediment      | 2.03 mg/kg dry weight (d.w.)  |
|                      | Marine sediment           | 0.203 mg/kg dry weight (d.w.) |
|                      | Soil                      | 0.1 mg/kg dry weight (d.w.)   |

## 8.2 Exposure controls

### Engineering measures

Minimize workplace exposure concentrations.

### Personal protective equipment

Eye/face protection : Ensure that eyewash stations and safety showers are close to the workstation location.  
Please follow all applicable local/national requirements when selecting protective measures for a specific workplace.  
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.  
Tightly fitting safety goggles  
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.

### Hand protection

Material : butyl-rubber  
Break through time : 480 min  
Glove thickness : 0.47 mm  
  
Material : Nitrile rubber  
Break through time : 480 min  
Glove thickness : 0.40 mm

Remarks : The data about break through time/strength of material are



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standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.  
Wear as appropriate:  
Flame retardant antistatic protective clothing.
- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
- Filter type : Filter type P
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : crystalline
- Colour : white
- Odour : not significant
- Odour Threshold : not determined
- pH : 4  
Concentration: 10 g/l
- Melting point/freezing point : Decomposition: Decomposes below the melting point.
- Initial boiling point and boiling range : Not applicable

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|  |   |  |
|--|---|--|
| Flash point                                      | : | Not applicable   |
| Evaporation rate                                 | : | Not applicable   |
| Flammability (solid, gas)                        | : | Not expected to form explosive dust-air mixtures.                        |
| Upper explosion limit / Upper flammability limit | : | Upper explosion limit<br>No data available                               |
| Lower explosion limit / Lower flammability limit | : | Lower explosion limit<br>No data available                               |
| Vapour pressure                                  | : | < 0.001 hPa (25 °C)  |
| Relative vapour density                          | : | not determined   |
| Relative density                                 | : | not determined   |
| Density  | : | not determined   |
| Bulk density                                     | : | ca. 1,100 kg/m <sup>3</sup> (20 °C)                                      |
| Solubility(ies)<br>Water solubility              | : | 850 g/l soluble (25 °C)  |
| Partition coefficient: n-octanol/water           | : | Not applicable   |
| Auto-ignition temperature                        | : | not determined   |
| Viscosity<br>Viscosity, dynamic                  | : | Not applicable   |
| Viscosity, kinematic                             | : | Not applicable   |
| Explosive properties                             | : | Not explosive  |
| Oxidizing properties                             | : | The substance or mixture is classified as oxidizing with the category 3. |

### 9.2 Other information

|  |   |   |
|--|---|---|
| Self-Accelerating decomposition temperature (SADT) | : | 130 °C<br>Method: UN-Test H.4<br>SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction. |
| Self-heating substances                            | : | The substance or mixture is not classified as self heating.   |

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|                            |   |   |
|----------------------------|---|---|
| Particle size              | : | not determined  |
| Particle Size Distribution | : | D10 = 9 µm<br>Type of distribution: volume distribution<br>Measurement technique: laser diffraction |
| Self-ignition              | : | The substance or mixture is not classified as pyrophoric.   |

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Stable under recommended storage conditions.  
May intensify fire; oxidizer.

#### 10.2 Chemical stability

Stable under recommended storage conditions.  
No decomposition if stored normally.

#### 10.3 Possibility of hazardous reactions

|                     |   |   |
|---------------------|---|---|
| Hazardous reactions | : | Avoid moisture.<br>Even small amounts of moisture or impurities can noticeably reduce the self-accelerating decomposition temperature (SADT). |
|---------------------|---|---|

#### 10.4 Conditions to avoid

|                     |   |   |
|---------------------|---|---|
| Conditions to avoid | : | Protect from contamination.<br>Protect from moisture.<br>Contact with incompatible substances can cause decomposition at or below SADT.<br>Even small amounts of moisture or impurities can noticeably reduce the self-accelerating decomposition temperature (SADT). |
|---------------------|---|---|

#### 10.5 Incompatible materials

|                    |   |   |
|--------------------|---|---|
| Materials to avoid | : | Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents |
|--------------------|---|---|

#### 10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Harmful if swallowed.

##### Components:

##### Ammonium persulphate:

|                           |   |   |
|---------------------------|---|---|
| Acute oral toxicity       | : | LD50 (Rat, male): 742 mg/kg<br>Method: OECD Test Guideline 401<br>Assessment: The component/mixture is moderately toxic after single ingestion.<br>Remarks: Based on test data                                      |
| Acute inhalation toxicity | : | LC50 (Rat): > 5.1 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: OECD Test Guideline 403<br>Assessment: The substance or mixture has no acute inhalation toxicity<br>Remarks: Expert judgement |
| Acute dermal toxicity     | : | LD50 (Rat): > 2,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity<br>Remarks: Expert judgement   |

##### Skin corrosion/irritation

Causes skin irritation.

##### Product:

|         |   |   |
|---------|---|---|
| Species | : | Rabbit  |
| Method  | : | OECD Test Guideline 404                           |
| Result  | : | Skin irritation                                   |
| Remarks | : | May cause skin irritation in susceptible persons. |

##### Components:

##### Ammonium persulphate:

|         |   |                         |
|---------|---|-------------------------|
| Species | : | Rabbit                  |
| Method  | : | OECD Test Guideline 404 |
| Result  | : | Skin irritation         |

##### Serious eye damage/eye irritation

Causes serious eye irritation.

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### Product:

|         |   |                                    |
|---------|---|------------------------------------|
| Species | : | Rabbit                             |
| Method  | : | OECD Test Guideline 405            |
| Result  | : | Irritating to eyes.                |
| Remarks | : | May cause irreversible eye damage. |

### Components:

#### **Ammonium persulphate:**

|         |   |                         |
|---------|---|-------------------------|
| Species | : | Rabbit                  |
| Method  | : | OECD Test Guideline 405 |
| Result  | : | Irritating to eyes.     |

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

May cause an allergic skin reaction.

#### **Respiratory sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### Product:

|                 |   |  |
|-----------------|---|--|
| Exposure routes | : | Skin contact                             |
| Species         | : | Guinea pig                               |
| Method          | : | OECD Test Guideline 406                  |
| Result          | : | May cause sensitisation by skin contact. |
| Exposure routes | : | inhalation (dust/mist/fume)              |
| Result          | : | May cause sensitisation by inhalation.   |
| Remarks         | : | Causes sensitisation.                    |

### Components:

#### **Ammonium persulphate:**

|                 |   |  |
|-----------------|---|--|
| Exposure routes | : | Skin contact                             |
| Species         | : | Guinea pig                               |
| Method          | : | OECD Test Guideline 406                  |
| Result          | : | May cause sensitisation by skin contact. |
| Exposure routes | : | inhalation (dust/mist/fume)              |
| Result          | : | May cause sensitisation by inhalation.   |

### **Germ cell mutagenicity**

Not classified due to lack of data.

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### Components:

#### **Ammonium persulphate:**

|                       |   |   |
|-----------------------|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative                                      |
| Genotoxicity in vivo  | : | Species: Mouse<br>Application Route: Intraperitoneal<br>Method: OECD Test Guideline 474<br>Result: negative |

#### **Carcinogenicity**

Not classified due to lack of data.

### Components:

#### **Ammonium persulphate:**

|                   |   |                         |
|-------------------|---|-------------------------|
| Species           | : | Mouse                   |
| Application Route | : | Skin contact            |
| Exposure time     | : | 52 weeks                |
| Method            | : | OECD Test Guideline 451 |
| Result            | : | negative                |

#### **Reproductive toxicity**

Not classified due to lack of data.

### Components:

#### **Ammonium persulphate:**

|                      |   |   |
|----------------------|---|---|
| Effects on fertility | : | Species: Rat<br>Application Route: Ingestion<br>General Toxicity - Parent: NOAEL: $\geq 250$ mg/kg body weight<br>General Toxicity F1: NOAEL: $\geq 250$ mg/kg body weight<br>Method: OECD Test Guideline 421 |
|----------------------|---|---|

#### **STOT - single exposure**

May cause respiratory irritation.

### Product:

|            |   |                                   |
|------------|---|-----------------------------------|
| Assessment | : | May cause respiratory irritation. |
|------------|---|-----------------------------------|

### Components:

#### **Ammonium persulphate:**

|            |   |                                   |
|------------|---|-----------------------------------|
| Assessment | : | May cause respiratory irritation. |
|------------|---|-----------------------------------|

#### **STOT - repeated exposure**

Based on available data, the classification criteria are not met.

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### Components:

#### **Ammonium persulphate:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **Repeated dose toxicity**

### Components:

#### **Ammonium persulphate:**

Species : Rat  
NOAEL : 1,000 mg/kg  
LOAEL : 3,000 mg/kg  
Application Route : Ingestion  
Exposure time : 90 d  
Method : OECD Test Guideline 408

Species : Rat  
NOAEL : 41.1 mg/kg  
Application Route : oral (feed)  
Exposure time : 28 d  
Method : OECD Test Guideline 407

Species : Rat  
NOAEL : 0.0103 mg/l  
Application Route : inhalation (dust/mist/fume)  
Method : OECD Test Guideline 413

Species : Rat  
NOAEL : 0.005 mg/l  
Application Route : inhalation (dust/mist/fume)  
Method : OECD Test Guideline 413

#### **Aspiration toxicity**

Not classified due to lack of data.

#### **Further information**

### Product:

Remarks : No data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

### Components:

#### **Ammonium persulphate:**

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|   |   |   |
|---|---|---|
| Toxicity to fish                                    | : | LC50 (Scophthalmus maximus (turbot)): 107.6 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203  |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 120 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202   |
| Toxicity to algae/aquatic plants                    | : | EC50 (Phaeodactylum): 320 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOEC (Phaeodactylum): 32 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to microorganisms                          | : | EC10 (Pseudomonas putida): 36 mg/l<br>Exposure time: 18 h   |

### 12.2 Persistence and degradability

#### Components:

##### **Ammonium persulphate:**

|                  |   |   |
|------------------|---|---|
| Biodegradability | : | Remarks: The methods for determining biodegradability are not applicable to inorganic substances. |
|------------------|---|---|

### 12.3 Bioaccumulative potential

#### Components:

##### **Ammonium persulphate:**

|  |   |                         |
|--|---|-------------------------|
| Partition coefficient: n-octanol/water | : | Remarks: Not applicable |
|--|---|-------------------------|

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

|            |   |  |
|------------|---|--|
| Assessment | : | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
|------------|---|--|

### 12.6 Other adverse effects

#### Product:



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Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : No data available

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Product : Dispose of wastes in an approved waste disposal facility.  
The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Dispose of in accordance with local regulations.  
Clean container with water.  
Dispose of contents/ container to an approved waste disposal plant.  
Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14: Transport information

#### 14.1 UN number

ADR : UN 1444  
RID : UN 1444  
IMDG : UN 1444  
IATA : UN 1444

#### 14.2 UN proper shipping name

ADR : AMMONIUM PERSULPHATE  
RID : AMMONIUM PERSULPHATE  
IMDG : AMMONIUM PERSULPHATE  
IATA : Ammonium persulphate

#### 14.3 Transport hazard class(es)

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|             | Class | Subsidiary risks |
|-------------|-------|------------------|
| <b>ADR</b>  | : 5.1 |                  |
| <b>RID</b>  | : 5.1 |                  |
| <b>IMDG</b> | : 5.1 |                  |
| <b>IATA</b> | : 5.1 |                  |

### 14.4 Packing group

|  |            |
|--|------------|
| <b>ADR</b>                               |            |
| Packing group                            | : III      |
| Classification Code                      | : O2       |
| Hazard Identification Number             | : 50       |
| Labels                                   | : 5.1      |
| Tunnel restriction code                  | : (E)      |
| <b>RID</b>                               |            |
| Packing group                            | : III      |
| Classification Code                      | : O2       |
| Hazard Identification Number             | : 50       |
| Labels                                   | : 5.1      |
| <b>IMDG</b>                              |            |
| Packing group                            | : III      |
| Labels                                   | : 5.1      |
| EmS Code                                 | : F-A, S-Q |
| <b>IATA (Cargo)</b>                      |            |
| Packing instruction (cargo aircraft)     | : 563      |
| Packing instruction (LQ)                 | : Y546     |
| Packing group                            | : III      |
| Labels                                   | : Oxidizer |
| <b>IATA (Passenger)</b>                  |            |
| Packing instruction (passenger aircraft) | : 559      |
| Packing instruction (LQ)                 | : Y546     |
| Packing group                            | : III      |
| Labels                                   | : Oxidizer |

### 14.5 Environmental hazards

|                           |      |
|---------------------------|------|
| <b>ADR</b>                |      |
| Environmentally hazardous | : no |
| <b>RID</b>                |      |
| Environmentally hazardous | : no |
| <b>IMDG</b>               |      |
| Marine pollutant          | : no |

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### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

|   |    |                              |
|---|----|------------------------------|
| UK REACH List of restrictions (Annex 17)  | :  | Not applicable               |
| UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation                             | :  | Not applicable               |
| The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) | :  | Not applicable               |
| Regulation (EC) No 1005/2009 on substances that deplete the ozone layer   | :  | Not applicable               |
| UK REACH List of substances subject to authorisation (Annex XIV)  | :  | Not applicable               |
| GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation                           | :  | Not applicable               |
| Control of Major Accident Hazards Regulations 2015 (COMAH)  | P8 | OXIDIZING LIQUIDS AND SOLIDS |

#### Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

#### The components of this product are reported in the following inventories:

|           |   |   |
|-----------|---|---|
| TCSI (TW) | : | On the inventory, or in compliance with the inventory |
| TSCA (US) | : | All substances listed as active on the TSCA inventory |

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|            |   |   |
|------------|---|---|
| AIIC (AU)  | : | All components are listed on the inventory, regulatory obligations/restrictions apply |
| DSL (CA)   | : | All components of this product are on the Canadian DSL                                |
| ENCS (JP)  | : | On the inventory, or in compliance with the inventory                                 |
| ISHL (JP)  | : | On the inventory, or in compliance with the inventory                                 |
| KECI (KR)  | : | On the inventory, or in compliance with the inventory                                 |
| PICCS (PH) | : | On the inventory, or in compliance with the inventory                                 |
| IECSC (CN) | : | On the inventory, or in compliance with the inventory                                 |
| TECI (TH)  | : | On the inventory, or in compliance with the inventory                                 |

### 15.2 Chemical safety assessment

This information is not available.

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## SECTION 16: Other information

### Further information

|                   |   |   |
|-------------------|---|---|
| Other information | : | This safety datasheet only contains information relating to safety and does not replace any product information or product specification.<br>These safety instructions also apply to empty packaging which may still contain product residues.<br>The hazards on the label also apply to residues in the container. |
|-------------------|---|---|

|   |   |   |
|---|---|---|
| Sources of key data used to compile the Safety Data Sheet | : | Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a> |
|---|---|---|

### Full text of H-Statements

|      |   |                               |
|------|---|-------------------------------|
| H272 | : | May intensify fire; oxidizer. |
| H302 | : | Harmful if swallowed.         |
| H315 | : | Causes skin irritation.       |

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H317 : May cause an allergic skin reaction.  
H319 : Causes serious eye irritation.  
H334 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 : May cause respiratory irritation.

### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Eye Irrit. : Eye irritation  
Ox. Sol. : Oxidizing solids  
Resp. Sens. : Respiratory sensitisation  
Skin Irrit. : Skin irritation  
Skin Sens. : Skin sensitisation  
STOT SE : Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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 guide-

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