

**APS**

|         |                |              |                                 |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number:  | Date of last issue: 2024/09/18  |
| 2.2     | 2025/10/20     | 600000000004 | Date of first issue: 2017/03/09 |

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**1. PRODUCT AND COMPANY IDENTIFICATION**

Chemical product name : APS

Other means of identification : Diammonium peroxydisulfate

**Supplier's company name, address and phone number**

Company name of supplier : United Initiators (Shanghai) Co., Ltd

Address : Room 501, Bldg. 1, No. 1 Shangda Road  
Shanghai, China, 200444

Telephone : +86 21 61172758

E-mail address : cs-initiators.cn@united-in.com

Emergency telephone number : +86 21 61172762

**Recommended use of the chemical and restrictions on use**

Recommended use : Oxidizing agents  
polymerisation initiators

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**2. HAZARDS IDENTIFICATION****GHS classification of chemical product**

Oxidizing solids : Category 3

Acute toxicity (Oral) : Category 4

Skin corrosion/irritation : Category 2

Serious eye damage/eye irritation : Category 2A

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Specific target organ toxicity - single exposure : Category 3 (respiratory tract irritation)

**GHS label elements**

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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 away from clothing and other combustible materials.  
P261 Avoid breathing dust.  
P264 Wash skin 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:**

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

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P370 + P378 In case of fire: Use water spray to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

None known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

|                     |   |                      |
|---------------------|---|----------------------|
| Substance / Mixture | : | Substance            |
| Chemical nature     | : | Persulphate<br>Solid |
| Substance name      | : | Ammonium Persulfate  |
| CAS-No.             | : | 7727-54-0            |

**Components**

| Chemical name        | CAS-No.   | Concentration (% w/w) | ENCS/ISHL number |
|----------------------|-----------|-----------------------|------------------|
| Ammonium persulphate | 7727-54-0 | 100                   | 1-406            |

**4. FIRST AID MEASURES**

|                |   |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice | : | Take off contaminated clothing and shoes immediately.<br>Call a physician immediately.<br>Never give anything by mouth to an unconscious person.<br>If unconscious, place in recovery position and seek medical advice.<br>Move out of dangerous area.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended.<br>Symptoms of poisoning may appear several hours later. |
| If inhaled     | : | Administer oxygen if breathing is difficult or cyanosis is observed.<br>If breathed in, move person into fresh air.<br>If not breathing, give artificial respiration.<br>Call a physician or poison control centre immediately.<br>If unconscious, place in recovery position and seek medical                                                                                                                     |

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- advice.  
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.
- Most important symptoms and effects, both acute and delayed : sensitising effects  
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.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
- Notes to physician : Treat symptomatically and supportively.

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**5. FIREFIGHTING MEASURES**

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

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

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**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : 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".
- 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 respective authorities.

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Methods and materials for containment and 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.

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**7. HANDLING AND STORAGE****Handling**

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

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.

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,

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allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Avoidance of contact : Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

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.

**Storage**

Conditions for safe storage : Store in original container.  
Keep containers tightly closed in a cool, well-ventilated place.  
Keep in a 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.

Materials to avoid : 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.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Threshold limit value and permissible exposure limits for each component in the work environment**

| Components | CAS-No. | Value type<br>(Form of exposure) | Control parameters / Concentration standard / Permissible con- | Basis |
|------------|---------|----------------------------------|----------------------------------------------------------------|-------|
|            |         |                                  |                                                                |       |

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|----------------------|-----------|-----|----------------------------------------|-------|
|                      |           |     | centration                             |       |
| Ammonium persulphate | 7727-54-0 | TWA | 0.1 mg/m <sup>3</sup><br>(Persulphate) | ACGIH |

**Engineering measures** : Minimize workplace exposure concentrations.

**Personal protective equipment**

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Filter type : Filter type P

**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 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.

Eye 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.

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.

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Wear as appropriate:  
Flame retardant antistatic protective clothing.

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                                                      |   |                                                           |
|----------------------------------------------------------------------|---|-----------------------------------------------------------|
| Physical state                                                       | : | crystalline                                               |
| Colour                                                               | : | white                                                     |
| Odour                                                                | : | odourless                                                 |
| Odour Threshold                                                      | : | not determined                                            |
| Melting point/freezing point                                         | : | Decomposition: Decomposes below the melting point.        |
| Initial boiling point and boiling range                              | : | Not applicable                                            |
| Flammability (solid, gas)                                            | : | Will not burn                                             |
| Lower explosion limit and upper explosion limit / flammability limit | : |                                                           |
| 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                |
| Flash point                                                          | : | Not applicable                                            |
| Self-ignition                                                        | : | The substance or mixture is not classified as pyrophoric. |
| pH                                                                   | : | 4<br>Concentration: ca. 10 g/l                            |
| Evaporation rate                                                     | : | Not applicable                                            |
| Bulk density                                                         | : | 1,100 kg/m <sup>3</sup> (20 °C)                           |
| Auto-ignition temperature                                            | : | Not applicable Decomposition                              |

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Self-Accelerating decomposition temperature (SADT) : 130 °C  
Method: UN-Test H.4  
SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.

Viscosity  
Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Solubility(ies)  
Water solubility : 850 g/l soluble (25 °C)

Partition coefficient: n-octanol/water : Not applicable

Vapour pressure : < 0.001 hPa (25 °C)

Density and / or relative density  
Relative density : not determined

Density : not determined

Relative vapour density : not determined

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is classified as oxidizing with the category 3.

Self-heating substances : The substance or mixture is not classified as self heating.

**Molecular weight** : 228.2 g/mol

Particle characteristics  
Particle size : not determined

Particle Size Distribution : D10 = 183 µm  
Type of distribution: volume distribution  
Measurement technique: laser diffraction

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**10. STABILITY AND REACTIVITY**

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

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|                                    |   |                                                                                                                                                                                                                                                                       |
|------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chemical stability                 | : | Stable under recommended storage conditions.<br><br>Stable under recommended storage conditions.<br>No decomposition if stored normally.                                                                                                                              |
| Possibility of hazardous reactions | : | Avoid moisture.<br>Even small amounts of moisture or impurities can noticeably reduce the self-accelerating decomposition temperature (SADT).                                                                                                                         |
| 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). |
| Incompatible materials             | : | Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents                                                                                                                                                                             |
| Hazardous decomposition products   | : | Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition                                                                                                                                                       |

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Harmful if swallowed.

**Product:**

|                     |   |                                                                |
|---------------------|---|----------------------------------------------------------------|
| Acute oral toxicity | : | LD50 (Rat, male): 742 mg/kg<br>Method: OECD Test Guideline 401 |
|---------------------|---|----------------------------------------------------------------|

**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 |
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Remarks: Expert judgement

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
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.

**Product:**

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

Remarks : Product dust may be irritating to eyes, skin and respiratory system.

**Components:****Ammonium persulphate:**

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

**Respiratory or skin sensitisation****Skin sensitisation**

May cause an allergic skin reaction.

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**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. |

|   |                                        |
|---|----------------------------------------|
| : | inhalation (dust/mist/fume)            |
| : | 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.

**Components:****Ammonium persulphate:**

|                       |   |                                                    |
|-----------------------|---|----------------------------------------------------|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES) |
|                       |   | Result: negative                                   |

|                      |   |                                    |
|----------------------|---|------------------------------------|
| Genotoxicity in vivo | : | Species: Mouse                     |
|                      |   | Application Route: Intraperitoneal |
|                      |   | Method: OECD Test Guideline 474    |
|                      |   | 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 |

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Result : negative

**Reproductive toxicity**

Not classified due to lack of data.

**Components:****Ammonium persulphate:**

Effects on fertility : Species: Rat  
Application Route: Ingestion  
General Toxicity - Parent: NOAEL:  $\geq$  250 mg/kg body weight  
General Toxicity F1: NOAEL:  $\geq$  250 mg/kg body weight  
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**

Not classified due to lack of data.

**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

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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  
 : 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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**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Ammonium persulphate:**

Toxicity to fish : LC50 (Scophthalmus maximus (turbot)): 107.6 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 120 mg/l  
aquatic invertebrates : Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic : EC50 (Phaeodactylum): 320 mg/l  
plants : Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Phaeodactylum): 32 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10 (Pseudomonas putida): 36 mg/l  
Exposure time: 18 h

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**Persistence and degradability****Components:****Ammonium persulphate:**

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

**Bioaccumulative potential****Components:****Ammonium persulphate:**

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

**Mobility in soil**

No data available

**Hazardous to the ozone layer**

Not applicable

**Other adverse effects****Product:**

Additional ecological information : No data available

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**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : 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.

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**14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

|                           |                        |
|---------------------------|------------------------|
| UN number                 | : UN 1444              |
| Proper shipping name      | : AMMONIUM PERSULPHATE |
| Class                     | : 5.1                  |
| Packing group             | : III                  |
| Labels                    | : 5.1                  |
| Environmentally hazardous | : no                   |

**IATA-DGR**

|                                          |                        |
|------------------------------------------|------------------------|
| UN/ID No.                                | : UN 1444              |
| Proper shipping name                     | : Ammonium persulphate |
| Class                                    | : 5.1                  |
| Packing group                            | : III                  |
| Labels                                   | : Oxidizer             |
| Packing instruction (cargo aircraft)     | : 563                  |
| Packing instruction (passenger aircraft) | : 559                  |

**IMDG-Code**

|                      |                        |
|----------------------|------------------------|
| UN number            | : UN 1444              |
| Proper shipping name | : AMMONIUM PERSULPHATE |
| Class                | : 5.1                  |
| Packing group        | : III                  |
| Labels               | : 5.1                  |
| EmS Code             | : F-A, S-Q             |
| Marine pollutant     | : no                   |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations**

Refer to section 15 for specific national regulation.

**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.

|          |       |
|----------|-------|
| ERG Code | : 140 |
|----------|-------|

## APS

|         |                |               |                                 |
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**15. REGULATORY INFORMATION****Related Regulations****Fire Service Law**

Group 1, Peroxodisulphates, 3rd oxidizing solid, (1000 kilogram), Hazardous rank III

**Chemical Substance Control Law**

Not applicable for Specified Chemical Substance, Monitoring Chemical Substance and Priority Assessment Chemical Substance.

**Industrial Safety and Health Law****Harmful Substances Prohibited from Manufacture**

Not applicable

**Harmful Substances Required Permission for Manufacture**

Not applicable

**Substances Prevented From Impairment of Health**

Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity**

Not applicable

**Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity**

Not applicable

**Substances Subject to be Notified Names**

Law Article 57-2 (Ministerial Order Article 34-2 Appended Table 2)

| Chemical name            | Concentration (%) | Remarks |
|--------------------------|-------------------|---------|
| Ammonium peroxodisulfate | >=90 - <=100      | -       |

**Substances Subject to be Indicated Names**

Law Article 57 (Ministerial Order Article 30 Appended Table 2)

| Chemical name            | Remarks |
|--------------------------|---------|
| Ammonium peroxodisulfate | -       |

**Skin and Eye Damage Substances (ISHL MO Art. 594-2)**

| Chemical name              |
|----------------------------|
| Diammonium peroxodisulfate |

**Carcinogenic Substances (Article 577-2 of the Occupational Health and Safety Regulations)**

Not applicable

**Ordinance on Prevention of Hazards Due to Specified Chemical Substances**

Not applicable

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**Ordinance on Prevention of Lead Poisoning**

Not applicable

**Ordinance on Prevention of Tetraalkyl Lead Poisoning**

Not applicable

**Ordinance on Prevention of Organic Solvent Poisoning**

Not applicable

**Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)**

Oxidizing Substance

**Poisonous and Deleterious Substances Control Law**

Not applicable

**Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof****Class I Designated Chemical Substances**

| Chemical name                                | Administration number | Concentration (%) |
|----------------------------------------------|-----------------------|-------------------|
| Water-soluble salts of peroxodisulfuric acid | 395                   | 100               |

**Explosive Control Law**

Not applicable

**Vessel Safety Law**

Oxidizing substances and organic peroxides (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

**Aviation Law**

Oxidizing substances and organic peroxides (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

**Marine Pollution and Sea Disaster Prevention etc Law**

Bulk transportation : Not classified as noxious liquid substance

Pack transportation : Not classified as marine pollutant

**Water Pollution Control Law**

Hazardous substance (Law Art. 2, Enforcement Order Art. 2, Cabinet Order Art. 1)

**Waste Disposal and Public Cleansing Law**

Industrial waste

**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

**APS**

|                |                              |                              |                                                                   |
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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                                 |
| NZIoC (NZ) | : On the inventory, or in compliance with the inventory                                 |
| TECI (TH)  | : On the inventory, or in compliance with the inventory                                 |

**Other regulations**

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**16. OTHER INFORMATION**

In this SDS, if the concentration of substances subject to notification under the Industrial Safety and Health Law is indicated as a range, it includes cases where it is a trade secret.

**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>                                                                                                                                   |
| Date format                                               | : yyyy/mm/dd                                                                                                                                                                                                                                                                                                          |

**Full text of other abbreviations**

|             |                                           |
|-------------|-------------------------------------------|
| ACGIH       | : USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH / TWA | : 8-hour, time-weighted average           |

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AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; GHS - Globally Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - 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; WHMIS - Workplace Hazardous Materials Information System

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.

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