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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- : Oxidizing agents, polymerisation initiators

stance/Mixture

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

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

### Classification (REGULATION (EC) No 1272/2008)

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)

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 protec-

tion/ 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.

Ecological information: 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.

Toxicological information: 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.

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May cause fire or explosion; strong oxidizer.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature : Persulphate

Solid

Components

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

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 ob-

served.

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

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Call a physician or poison control centre immediately. If unconscious, place in recovery position and seek medical

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 tis-

sue 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 difficul-

ties if inhaled.

May cause respiratory irritation.

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

Treatment : Treat symptomatically and supportively.

### **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

Suitable extinguishing media : Foam

Water spray jet

Unsuitable extinguishing : High volume water jet

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media

#### 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 nec-

essary. Use personal protective equipment.

Specific extinguishing meth-

ods

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 cir-

cumstances 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.

### SECTION 6: Accidental release measures

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

Personal precautions : Follow safe handling advice and personal protective equip-

ment 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.

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Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

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

Methods for cleaning up : Contact with incompatible materials or exposure to tempera-

tures 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 materi-

al, 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 deter-

mine which regulations are applicable.

### 6.4 Reference to other sections

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

## **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 ap-

plication area.

Wash thoroughly after handling. For personal protection see section 8.

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Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not 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 : Ne

Never allow product to get in contact with water during stor-

age.

Keep away from combustible materials.

Keep away from strong acids, bases, heavy metal salts and

other reducing substances.

Recommended storage tem-

perature

< 30 °C

Further information on stor-

age 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

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ammonium per-	7727-54-0	OELV - 8 hrs	0.1 mg/m3	IE OEL

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sulphate	(TWA) (	S2O8)	
	Further information: Chemical agents	which following exposure	may cause
	sensitisation of the respiratory tract a	and lead to asthma, rhinitis	or extrinsic
	allergic alveolitis		

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Ammonium persul- phate	Workers	Inhalation	Long-term local ef- fects	0.824 mg/m3
	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) according to Regulation (EC) No. 1907/2006:

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 pro-

tection if there is a splash hazard.

Equipment should conform to EN 166

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Hand protection

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

Directive : Equipment should conform to EN 374

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

Directive : Equipment should conform to EN 374

Directive : Equipment should conform to EN 374

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.

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, dis-

posable 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.

Respirator with combination filter for vapour/particulate (EN

141)

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.

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## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Physical state : crystalline

Colour : white

Odour : not significant

Odour Threshold : not determined

Melting point/freezing point : Decomposition: Decomposes below the melting point.

Initial boiling point and boiling

range

Not applicable

Flammability : Not expected to form explosive dust-air mixtures.

Upper explosion limit / Upper

flammability limit

Upper explosion limit
No data available

Lower explosion limit / Lower

flammability limit

Lower explosion limit No data available

Flash point : Not applicable

Auto-ignition temperature : not determined

Self-Accelerating decomposi-

tion 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.

pH : 4

Concentration: 10 g/l

Viscosity

Viscosity, dynamic : Not applicable

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Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : 850 g/l (25 °C)

soluble

Partition coefficient: n-

octanol/water

Not applicable

Dispersion Stability : not determined

Vapour pressure : < 0.001 hPa (25 °C)

Relative density : not determined

Density : not determined

Bulk density : ca. 1,100 kg/m3 (20  $^{\circ}$ C)

Relative vapour density : not determined

Particle characteristics

Assessment : This substance/ mixture does not contain nanoforms

based on: Measurement data

Information refers to the main component.

Particle size : not determined

Particle Size Distribution :  $D10 = 9 \mu m$ 

Type of distribution: volume distribution Measurement technique: laser diffraction

Dustiness : Avoid dust formation.

Shape : not determined

Crystallinity : not determined

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Surface treatment

/Coatings

Not applicable

9.2 Other information

Explosives : Not explosive

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

category 3.

Self-ignition : The substance or mixture is not classified as pyrophoric.

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

Substances and mixtures, which in contact with water, emit flammable gases

The substance or mixture does not emit flammable gases in

contact with water.

Desensitised explosives : Not applicable

Evaporation rate : Not applicable

# **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.

Even small amounts of moisture or impurities can noticably reduce the self-accelerating decomposition temperature

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(SADT).

10.4 Conditions to avoid

Conditions to avoid : Protect from contamination.

Protect from moisture.

Contact with incompatible substances can cause decomposi-

tion at or below SADT.

Even small amounts of moisture or impurities can noticably 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

### **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### **Acute toxicity**

Harmful if swallowed.

#### **Components:**

Ammonium persulphate:

Acute oral toxicity : LD50 (Rat, male): 742 mg/kg

Method: OECD Test Guideline 401

Assessment: The component/mixture is moderately toxic after

single ingestion.

Remarks: Based on test data

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

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

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#### 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

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)

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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.

**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

Result : negative

Reproductive toxicity

Not classified due to lack of data.

**Components:** 

Ammonium persulphate:

Effects on fertility : Species: Rat

Application Route: Ingestion

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General Toxicity - Parent: NOAEL: >= 250 mg/kg body weight General Toxicity F1: NOAEL: >= 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

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

**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

0.005 mg/l

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Application Route : inhalation (dust/mist/fume)
Method : OECD Test Guideline 413

Aspiration toxicity

Not classified due to lack of data.

11.2 Information on other hazards

**Endocrine disrupting properties** 

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered 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.

**Further information** 

**Product:** 

Remarks : No data available

## **SECTION 12: Ecological information**

### 12.1 Toxicity

### **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 :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 120 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Phaeodactylum): 320 mg/l

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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### 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 Endocrine disrupting properties

### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered 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.

### 12.7 Other adverse effects

#### **Product:**

Additional ecological infor-

mation

: No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of wastes in an approved waste disposal facility.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

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 or ID 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)

Class Subsidiary risks

ADR : 5.1

RID : 5.1

IMDG : 5.1

IATA : 5.1

## 14.4 Packing group

**ADR** 

Packing group : III

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Classification Code : O2
Hazard Identification Number : 50
Labels : 5.1
Tunnel restriction code : (E)

**RID** 

Packing group : III
Classification Code : O2
Hazard Identification Number : 50
Labels : 5.1

**IMDG** 

Packing group : III
Labels : 5.1
EmS Code : F-A, S-Q

IATA (Cargo)

Packing instruction (cargo : 563

aircraft)

Packing instruction (LQ) : Y546
Packing group : III
Labels : Oxidizer

IATA (Passenger)

Packing instruction (passen- : 559

ger aircraft)

Packing instruction (LQ) : Y546
Packing group : III
Labels : Oxidizer

14.5 Environmental hazards

**ADR** 

Environmentally hazardous : no

rid

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

### 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 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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### **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances.

mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered:

Number on list 75

If you intend to use this product as tattoo ink, please contact your ven-

dor.

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

OXIDIZING LIQUIDS AND **SOLIDS** 

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

P8

#### 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

AIIC (AU) All components are listed on the inventory, regulatory obliga-

tions/restrictions apply

DSL (CA) All components of this product are on the Canadian DSL

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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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.

#### **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 prod-

uct specification.

These safety instructions also apply to empty packaging which

may still contain product residues.

The hazards on the label also apply to residues in the con-

tainer.

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 Agen-

cy, http://echa.europa.eu/

### **Full text of H-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 difficul-

ties if inhaled.

H335 : May cause respiratory irritation.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity
Eye Irrit. : Eye irritation
Ox. Sol. : Oxidizing solids

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Resp. Sens. : Respiratory sensitisation

Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure

IE OEL : List of Chemical Agents and Carcinogens with Occupational

Exposure Limit Values - Code of Practice, Schedule 1 and 2

IE OEL / OELV - 8 hrs (TWA) : Occupational exposure limit value (8-hour reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - 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; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### 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.

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