

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.12.2015

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Ammonium Persulfate ACS

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Ammonium Persulfate ACS

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25178

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Oxidizing

Oxidizing solids, category 3



Irritant

Acute toxicity (oral, dermal, inhalation), category 4

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1

Specific target organ toxicity following single exposure, category 3



Health hazard

Respiratory sensitization, category 1

Oxid. Sol 3

Aq. ChrTox. 3

AcTox. Oral 4

AcTox. Dermal 4

Skin. Irrit 2

Eye. Irrit 2A

Resp. Sens. 1

Skin. Sens 1

STOT SE. 3

Aq. AcTox. 3

Signal word : Danger

Hazard statements:

May intensify fire; oxidizer

Harmful if swallowed

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Harmful in contact with skin
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
Harmful to aquatic life with long lasting effects

Precautionary statements:

If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use
Keep away from heat/sparks/open flames/hot surfaces. No smoking
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection
Keep/Store away from clothing/combustible materials
Take any precaution to avoid mixing with combustibles
Avoid breathing dust/fume/gas/mist/vapours/spray
Wash skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Avoid release to the environment
If eye irritation persists get medical advice/attention
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
Take off contaminated clothing and wash before reuse
In case of fire: Use agents recommended in section 5 for extinction
IF ON SKIN: Wash with soap and water
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Specific measures (see supplemental first aid instructions on this label)
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
If skin irritation or a rash occurs: Get medical advice/attention
Store in a well ventilated place. Keep container tightly closed
Store locked up
Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification:

WHMIS NFPA/HMIS



Health	2
Flammability	0
Physical Hazard	1
Personal Protection	X

HMIS RATINGS (0-4)

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SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 7727-54-0	Diammonium peroxodisulphate	100 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Seek medical attention. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact: Seek medical attention. Wash hands and exposed skin with soap and plenty of water.

After eye contact: Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing.

After swallowing: Seek medical attention. Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness.; Skin irritation varies

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: May intensify fire; oxidiser. Use water spray to cool unopened containers. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustible dust formation is a risk. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid dust generation. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal.

Reference to other sections:

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SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid dust generation. Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection



Control Parameters:

7727-54-0, Diammonium peroxodisulphate, TWA 0.1 mg/m³ USA. ACGIH

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Face shield and tightly fitting goggles are appropriate eye protection. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before reusing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	White powder	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Not Determined	Vapor pressure:	Not Determined
Odor threshold:	Not Determined	Vapor density:	7.88 - (Air = 1.0)
pH-value:	3 (100g/L)	Relative density:	1.980 g/cm ³
Melting/Freezing point:	Not Determined	Solubilities:	Soluble in water: Completely 228 g/l at 20 °C

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Boiling point/Boiling range:	Not Determined	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	120 °C
Flammability (solid,gaseous):	Flammable	Viscosity:	a. Kinematic:Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity:Nonreactive under normal conditions.

Chemical stability:Stable under normal conditions.

Possible hazardous reactions:None under normal processing.

Conditions to avoid:Dust generation.Air, light, and moisture sensitive.Incompatible materials.

Incompatible materials:Reducing agents, metals, finely powdered metals, aluminum, copper, magnesium, iron, silver, zinc, lead, nickel, combustible materials.

Hazardous decomposition products:Nitrogen oxides.Sulfur oxides.Carbon oxides.Ammonia

SECTION 11 : Toxicological information

Acute Toxicity:		
Dermal:	7727-54-0	LD50 Oral - rat - 689 mg/kg
Dermal:	7727-54-0	LD50 Dermal - rat - > 2,000 mg/kg
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Ocular:	7727-54-0	Eyes - rabbit Result: Mild eye irritation
Sensitization:		- guinea pig Result: Causes sensitisation.
Single Target Organ (STOT):		May cause respiratory irritation.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity

7727-54-0 : LC50 - Oncorhynchus mykiss (rainbow trout) - 76 mg/l - 96 h

7727-54-0 : EC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h

Persistence and degradability:

Bioaccumulative potential:

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Mobility in soil:

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

1444

UN proper shipping name

Ammonium persulfate

Transport hazard class(es)

Packing group: III

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Reactive, Acute

SARA Section 313 (Specific toxic chemical listings):

7727-54-0 Diammonium peroxodisulphate

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

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None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: . The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

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