

SECTION 1: Identification of the substance/mixture

1.1. Product identifier

Product form	: Substance
Substance name	: Ammonium Sulfate
Formula	: $(\text{NH}_4)_2\text{SO}_4$
Molecular weight	: 132.14 g/mol
CAS No.	: 7783-20-2
Product code	: LW-(NH4)2SO4
Synonyms	: Ammonium sulphate

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

Use of the substance/mixture	: Laboratory chemicals, Synthesis of substances
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1.3. Emergency telephone number

Emergency number	: 1.800.424.9300 (USA) +1.703.527.3887 (INT)
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SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. GHS Label elements, including precautionary statements

Pictogram	: None
Signal word	: None
Hazard statement(s)	
H412	: Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P273	: Avoid release to the environment.
P501	: Dispose of contents/ container to an approved waste disposal plant.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

none

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SECTION 3: Composition/information on ingredients

3.1. Substances

Hazardous components

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: Description of first aid measures

4.1. Description of first aid measures

General advice	: Consult a physician. Show this safety data sheet to the doctor in attendance.
First-aid measures after inhalation	: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

no data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

nitrogen oxides (NO_x), Sulphur oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4. More Information

The product itself does not burn.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

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For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3. Personal protective equipment

Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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Skin Protection : Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method:

EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection : Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls : Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Form: crystalline Color: white
Odor	: No data available
Odor Threshold	: No data available
pH	: 5.0 - 6 at 132 g/l at 25 °C (77 °F)
Melting point/freezing point	: Melting point/range: > 280 °C (> 536 °F) - dec.
Initial boiling point and boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper/lower flammability or explosive limits	: No data available
Vapor pressure	: No data available
Vapor density	: No data available
Relative density	: 1.77 g/cm ³ at 25 °C (77 °F)
Water solubility	: 132 g/l at 20 °C (68 °F) - completely soluble
Partition coefficient: n-octanol/water	: log Pow: -5.1
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: no data available

9.2. Other safety information

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

no data available

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10.4. Conditions to avoid

no data available

10.5. Incompatible materials

Strong oxidizing agents, Strong bases

10.6. Hazardous decomposition products

Other decomposition products - no data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : no data available
Inhalation: no data available
Dermal: no data available
no data available

Skin corrosion/irritation : Skin - rabbit
Result: No skin irritation
Skin - Human
Result: Mild skin irritation

Serious eye damage/irritation : Eyes - rabbit
Result: No eye irritation
Eyes - Human
Result: Mild eye irritation

Respiratory or skin sensitization : no data available

Germ cell mutagenicity : no data available

Carcinogenicity

Human carcinogen. May cause cancer by inhalation.

IARC: : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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OSHA:	:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	:	no data available
Specific target organ toxicity (single exposure)	:	no data available
Specific target organ toxicity (repeated exposure)	:	no data available
Aspiration hazard	:	No data available
Additional Information	:	RTECS: BS4500000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish	:	LC50 - Oncorhynchus mykiss (rainbow trout) - 36.7 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 - Daphnia magna (Water flea) - 433 mg/l - 50 h

12.2. Persistence and degradability : No data available

12.3. Bioaccumulative potential : No data available

12.3. Mobility in soil : No data available

12.4. Results of PBT and vPvB assessment : PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6. 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

13.1. Waste treatment methods

Product	:	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated Packaging	:	Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

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Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

Ammonium sulphate	CAS-No.	Revision Date
	7783-20-2	1993-04-24

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Ammonium sulphate	CAS-No.	Revision Date
	7783-20-2	1993-04-24

New Jersey Right To Know Components

Ammonium sulphate	CAS-No.	Revision Date
	7783-20-2	1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H402	: Harmful to aquatic life.
H412	: Harmful to aquatic life with long lasting effects.

HMIS Rating

Health Hazard	: 1
Chronic Health Hazard	:

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Flammability : 0

Physical Hazard : 0

NFPA Rating

Health hazard : 0

Fire Hazard : 0

Reactivity Hazard : 0

Further Information

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