

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 09.28.2017

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## Ammonium Dichromate

### SECTION 1: Identification

#### Product identifier

**Product name:** Ammonium Dichromate

**Product code:** S25169A

#### Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable.

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

#### Manufacturer or supplier details

##### Manufacturer:

AquaPhoenix Scientific  
860 Gitts Run Road  
Hanover  
PA 17331  
(717) 632-1291

##### Supplier:

Fisher Science Education  
6771 Silver Crest Road  
Nazareth  
PA 18064  
800 955-1177

#### Emergency telephone number:

**United States**

Emergency Telephone No.: 800-255-3924

### SECTION 2: Hazard(s) identification

#### GHS classification:

Oxidizing solids, category 2  
Acute toxicity (oral), category 3  
Acute toxicity (dermal), category 4  
Acute toxicity (inhalation), category 2  
Skin corrosion, category 1B  
Serious eye damage, category 1  
Skin sensitization, category 1  
Respiratory sensitization, category 1  
Germ cell mutagenicity, category 1B  
Carcinogenicity, category 1B  
Reproductive toxicity, category 1B  
Specific target organ toxicity - repeated exposure, category 1  
Acute aquatic hazard, category 1  
Chronic aquatic hazard, category 1

#### Label elements

##### Hazard pictograms:



**Signal word:** Danger

#### Hazard statements:

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H272 May intensify fire; oxidizer  
H301 Toxic if swallowed  
H312 Harmful in contact with skin  
H330 Fatal if inhaled  
H314 Causes severe skin burns and eye damage  
H318 Causes serious eye damage  
H317 May cause an allergic skin reaction  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H340 May cause genetic defects  
H350 May cause cancer  
H360 May damage fertility or the unborn child  
H372 Causes damage to organs through prolonged or repeated exposure  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects

### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking  
P220 Keep/Store away from clothing/combustible materials  
P221 Take any precaution to avoid mixing with combustibles  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P264 Wash skin thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P271 Use only outdoors or in a well-ventilated area  
P284 Wear respiratory protection  
P272 Contaminated work clothing should not be allowed out of the workplace  
P285 In case of inadequate ventilation wear respiratory protection  
P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P273 Avoid release to the environment  
P370+P378 In case of fire: Use agents recommended in section 5 for extinction  
P363 Wash contaminated clothing before reuse  
P302+P352+P312 If on skin: Wash with soap and water. Call a poison center or doctor/physician if you feel unwell  
P320 Specific treatment is urgent (see ... on this label)  
P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician  
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.  
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P308+P313 If exposed or concerned: Get medical advice/attention  
P391 Collect spillage  
P405 Store locked up  
P403+P233 Store in a well ventilated place. Keep container tightly closed  
P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

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Identification	Name	Weight %
CAS number: 7789-09-5	Ammonium Dichromate	100

**Additional Information:** None

## SECTION 4: First aid measures

### Description of first aid measures

#### General notes:

Not determined or not applicable.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Get medical advice/attention if you feel unwell  
Move exposed individual to fresh air  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Wash affected area with soap and water  
Seek medical attention if symptoms develop or persist  
Immediately remove all contaminated clothing  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention  
Remove contact lens(es) if able to do so during rinsing  
Immediately call a POISON CONTROL CENTER or seek medical attention

#### After swallowing:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Immediately call a POISON CONTROL CENTER or seek medical attention  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

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

#### Acute symptoms and effects:

Not determined or not applicable.

#### Delayed symptoms and effects:

Not determined or not applicable.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

#### Notes for the doctor:

Not determined or not applicable.

## SECTION 5: Firefighting measures

### Extinguishing media

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### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

### Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Will release oxygen when heated, intensifying a fire

### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

### Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

### Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

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

Wear protective eye wear, gloves and clothing

Sweep or scoop up solid material while minimizing dust generation

Dispose of contents / container in accordance with local regulations

### Reference to other sections:

Not determined or not applicable.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

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

Keep container tightly sealed.

Keep container dry.

Store in a cool, well-ventilated area.

Store away from flammable and combustible materials (paper, wood).

Store away from reducing agents (zinc, alkaline metals, formic acid).

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

No occupational exposure limits noted for the ingredient(s).

### Biological limit values:

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

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Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

### 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.

### Personal protection equipment

#### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

#### Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

### General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Orange to red solid
<b>Odor</b>	Odorless
<b>Odor threshold</b>	No information available.
<b>pH</b>	.45 for 10% Solution
<b>Melting point/freezing point</b>	Approx. 170°C
<b>Initial boiling point/range</b>	Not applicable.
<b>Flash point (closed cup)</b>	Not applicable.
<b>Evaporation rate</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper flammability/explosive limit</b>	No information available.
<b>Lower flammability/explosive limit</b>	No information available.
<b>Vapor pressure</b>	No information available.
<b>Vapor density</b>	No information available.
<b>Density</b>	No information available.
<b>Relative density</b>	2.15
<b>Solubilities</b>	Approx. 360 g/l at 20°C
<b>Partition coefficient (n-octanol/water)</b>	No information available.
<b>Auto/Self-ignition temperature</b>	218°C
<b>Decomposition temperature</b>	No information available.
<b>Dynamic viscosity</b>	No information available.
<b>Kinematic viscosity</b>	No information available.

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## Ammonium Dichromate

<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	Oxidizing Solid

### Other information

<b>Molecular Weight</b>	252.06
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## SECTION 10: Stability and reactivity

### Reactivity:

Does not react under normal conditions of use and storage.

### Chemical stability:

Heating may cause an explosion.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### Conditions to avoid:

Ignition source, excess heat combustable material

### Incompatible materials:

Acids, bases, alcohols, hydrazine, sodium nitrate, carbides, ethylene glycol, reducing reagent.

### Hazardous decomposition products:

Oxides of Nitrogen

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Toxic if swallowed Harmful in contact with skin Fatal if inhaled

**Product data:** No data available.

#### Substance data:

Name	Route	Result
Ammonium Dichromate	oral	LD50 - Rat - 53 mg/kg
	inhalation	LC50 - Rat - 4 h - 160 ppm

### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

#### Substance data:

Name	Result
Ammonium Dichromate	Causes severe skin burns and eye damage.

### Serious eye damage/irritation

**Assessment:** Causes serious eye damage

**Product data:** No data available.

**Substance data:** No data available.

### Respiratory or skin sensitization

**Assessment:** May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Product data:** No data available.

#### Substance data:

Name	Result
Ammonium Dichromate	May cause an allergic skin reaction.

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## Ammonium Dichromate

### Carcinogenicity

**Assessment:** May cause cancer

**Product data:** No data available.

**Substance data:**

Name	Species	Result
Ammonium Dichromate		This is a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen

### International Agency for Research on Cancer (IARC):

Name	Classification
Ammonium Dichromate	Group 1

**National Toxicology Program (NTP):** None of the ingredients are listed.

### Germ cell mutagenicity

**Assessment:** May cause genetic defects

**Product data:** No data available.

**Substance data:**

Name	Result
Ammonium Dichromate	May alter genetic material. In vivo tests showed mutagenic effects.

### Reproductive toxicity

**Assessment:** May damage fertility or the unborn child

**Product data:** No data available.

**Substance data:**

Name	Result
Ammonium Dichromate	May cause congenital malformation in the fetus. Presumed human reproductive toxicant. May cause reproductive disorders.

### Specific target organ toxicity (single exposure)

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

**Product data:** No data available.

**Substance data:** No data available.

### Specific target organ toxicity (repeated exposure)

**Assessment:** Causes damage to organs through prolonged or repeated exposure

**Product data:** No data available.

**Substance data:**

Name	Result
Ammonium Dichromate	Causes damage to organs through prolonged or repeated exposure.

### Aspiration toxicity

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

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

## SECTION 12: Ecological information

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## Ammonium Dichromate

### Acute (short-term) toxicity

**Assessment:** Very toxic to aquatic life

**Product data:** No data available.

**Substance data:**

Name	Result
Ammonium Dichromate	LC0 - Leuciscus idus (Golden orfe) - 50 mg/l - 48 h

### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.


## SECTION 13: Disposal considerations

### Disposal methods:


It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities Do not discharge into drains

## SECTION 14: Transport information

### United States Transportation of dangerous goods (49 CFR DOT)

UN number	UN 1439
UN proper shipping name	Ammonium Dichromate
UN transport hazard class(es)	5.1 
Packing group	II
Environmental hazards	Marine Pollutant
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	UN 1439
UN proper shipping name	Ammonium Dichromate
UN transport hazard class(es)	5.1 
Packing group	II
Environmental hazards	Marine Pollutant
Special precautions for user	None



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### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Bulk Name	None
Ship type	None
Pollution category	None

## SECTION 15: Regulatory information

### United States regulations

#### Inventory listing (TSCA):

7789-09-5	Ammonium Dichromate	Listed
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**Significant New Use Rule (TSCA Section 5):** Not determined.

**Export notification under TSCA Section 12(b):** Not determined.

#### SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
No	No	No	No	No

**SARA Section 302 extremely hazardous substances:** Not determined.

#### SARA Section 313 toxic chemicals:

7789-09-5	Ammonium Dichromate	Listed
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#### CERCLA:

7789-09-5	Ammonium Dichromate	Listed	10 lbs
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**RCRA:** Not determined.

**Section 112(r) of the Clean Air Act (CAA):** Not determined.

#### Massachusetts Right to Know:

7789-09-5	Ammonium Dichromate	Listed
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#### New Jersey Right to Know:

7789-09-5	Ammonium Dichromate	Listed
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#### New York Right to Know:

7789-09-5	Ammonium Dichromate	Listed
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#### Pennsylvania Right to Know:

7789-09-5	Ammonium Dichromate	Listed
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#### California Proposition 65:

WARNING: This product contains a chemical known to the State of California to cause cancer.

7789-09-5	Ammonium Dichromate
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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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### SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 3-1-1

**HMIS:** 3-1-1

**Initial preparation date:** 09.28.2017

**End of Safety Data Sheet**