

Safety Data Sheet  
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name</b>	Ammonium Persulfate, ACS	
<b>NCL Catalog Number</b>	A-48	
<b>Product Description</b>	Laboratory chemical	
<b>Manufacturer</b>	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
<b>Supplier</b>	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: <a href="mailto:nclabs@nclabs.com">nclabs@nclabs.com</a>	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS Classification**

Oxidizing Solids	Category 3
Acute Toxicity	Oral Category 4
Acute Toxicity	Dermal Category 4
Skin Irritation	Category 2
Eye Irritation	Category 2A
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Specific Target Organ Toxicity	Single Exposure Category 3
Acute Aquatic	Category 3
Chronic Aquatic	Category 3



**Signal Word**

Danger

**Hazard Statements**

H272	May intensify fire; oxidizer.
H302+H312	Harmful if swallowed or in contact with skin.
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.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

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 exposed 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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P312	Call a POISON CENTER or doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.
<b>Other Hazards Not Contributing to the Classification</b>	None under normal conditions.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>Formula</b>	H <sub>8</sub> N <sub>2</sub> O <sub>8</sub> S <sub>2</sub>
<b>Molecular Weight</b>	228.20 g/mol

#### Substance

Name	CAS #	Approximate %
Ammonium Persulfate	7727-54-0	100

### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

<b>General First Aid Measures</b>	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
<b>If Inhaled</b>	Remove person to fresh air and keep comfortable for breathing. Allow victim to rest. Contact a POISON CENTER or doctor if you feel unwell.
<b>In Case of Skin Contact</b>	Remove all contaminated clothing. Rinse skin with water/shower. Contact a POISON CENTER or doctor if you feel unwell.
<b>In Case of Eye Contact</b>	Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact a POISON CENTER or doctor if you feel unwell.
<b>If Swallowed</b>	Rinse mouth. Do NOT induce vomiting. Contact a POISON CENTER or doctor if you feel unwell.

#### Most Important Symptoms/Effects Acute and Delayed

See section 2 and/or section 11.

#### Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if you feel unwell.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media** Foam. Dry powder. Sand. Carbon dioxide. Water spray.

**Unsuitable Extinguishing Media** Do not use high pressure water stream.

#### Special Hazards Arising from the Chemical

Nitrogen oxides, Sulphur oxides. Container explosion may occur under fire conditions.

#### Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

#### Other Information

May intensify fire; oxidizer. Use water spray to cool unopened containers.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Ventilate area.
<b>Environmental Precautions</b>	Prevent entry to surface and ground waters.
<b>Methods and Materials for Containment and Cleaning Up</b>	Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal. Store away from other materials. Ensure compliance with local, state and federal regulations.

**SECTION 7: HANDLING AND STORAGE**

<b>Precautions for Safe Handling</b>	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
<b>Conditions for Safe Storage Including any Incompatibilities</b>	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from sunlight, which can contribute to instability. Store away from strong reducing agents, organic materials and powdered metals.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters**

<b>Ammonium Persulfate (7727-54-0)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>

**Appropriate Engineering Controls**

Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

**Individual Protection Measures**

**Eye/Face Protection**

Avoid all unnecessary exposure.

Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

**Skin Protection**

Wear protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

**Respiratory Protection**

Wear appropriate mask.

**Other Information**

Do not eat, drink, or smoke when using this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Powder
<b>Color</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	Not determined
<b>pH</b>	1.0-2.0 at 228 g/l at 25°C (77°F)
<b>Melting Point/Freezing Point</b>	Not determined
<b>Initial Boiling Point and Boiling Range</b>	Not determined
<b>Flash Point</b>	Not determined
<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not determined
<b>Upper/Lower Flammability/Explosive Limits</b>	Not determined
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	7,88 (Air =1.0)
<b>Relative Density</b>	1.980 g/cm <sup>3</sup>
<b>Solubility</b>	228 g/l at 20°C (68°F) – Completely soluble.
<b>Partition Coefficient: n-octanol/water</b>	Not determined
<b>Auto-Ignition Temperature</b>	Not determined

<b>Decomposition Temperature</b>	Not determined
<b>Viscosity</b>	Not determined

### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	No data available.
<b>Chemical Stability</b>	May decompose on exposure to moist air or water. Stable under ordinary conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	No data available.
<b>Conditions to Avoid</b>	No data available.
<b>Incompatible Materials</b>	Strong reducing agents, organic materials, and powdered metals.
<b>Hazardous Decomposition Products</b>	Sulfur oxides, nitrogen oxides, and ammonia.

### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	Harmful if swallowed or in contact with skin.
<b>Ammonium Persulfate (7727-54-0)</b>	
<b>LD50 oral rat</b>	689 mg/kg
<b>LD50 dermal rat</b>	2000 mg/kg
<b>Skin Corrosion/Irritation</b>	Causes skin irritation.
<b>Serious Eye Damage/Irritation</b>	Causes serious eye irritation.
<b>Respiratory or Skin Sensitization</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure)</b>	May cause respiratory sensitization.
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Not classified
<b>Aspiration Hazard</b>	Not classified
<b>Potential Adverse Human Health Effects and Symptoms</b>	No data available
<b>Symptoms/Injuries After Inhalation</b>	May cause allergy or asthma symptoms or breathing difficulties.
<b>Symptoms/Injuries After Skin Contact</b>	May cause an allergic skin reaction.
<b>Symptoms/Injuries After Eye Contact</b>	Causes serious eye irritation.
<b>Symptoms/Injuries After Ingestion</b>	Harmful if swallowed.
<b>Other Information</b>	Not available

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity – Water** Harmful to aquatic life with long lasting effects.

<b>Ammonium Persulfate (7727-54-0)</b>	
LC50 fish	76 mg/l; 96 h (Oncorhynchus mykiss)
EC50 daphnia	120 mg/l; 48 h (Daphnia magna)

<b>Persistence and Degradability</b>	Not applicable
<b>Bioaccumulative Potential</b>	Not applicable
<b>Mobility in Soil</b>	Not applicable
<b>Other Adverse Effects</b>	Harmful to aquatic life.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Methods of Disposal**

**Disposal Recommendations** Dispose of contents/containers in accordance with local, state and federal regulations.

**Other Information** Avoid release to the surrounding environment.

**SECTION 14: TRANSPORT INFORMATION**

**UN Number** 1444

**UN Shipping Name** Ammonium Persulfate

**Transport Hazard Class(es)** 5.1

**Packing Group** III

**Environmental Hazards** None

**Transport in Bulk** Not applicable

**Other Precautions** Not applicable

**SECTION 15: REGULATORY INFORMATION**

<b>Ammonium Persulfate (7724-54-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

**SECTION 16: OTHER INFORMATION**

Revision Date: 02/03/2015

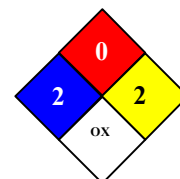
**NFPA Hazards**

**Health Hazard** 2: Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.

**Fire Hazard** 0: Materials that will not burn.

**Reactivity/Instability** 2: Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form explosive mixtures with water.

**Special Hazard** OX



**HMIS III Rating**

**Health** 2: Temporary or minor injury may occur.

**Flammability** 0: Materials that will not burn.

**Physical Hazard** 2: Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

**Personal Protection** C

<b>A-48</b>	
Health	2
Flammability	0
Physical Hazard	2
Personal Protection	C

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, NCL of Wisconsin, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for their conditions of use. Accordingly, NCL of Wisconsin, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

**END OF SAFETY DATA SHEET**