

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Ammonium Persulfate

### Other means of identification

**Product Code(s)** 0486

**UN/ID no.** 1444

**Synonyms** No information available

### Recommended use of the chemical and restrictions on use

**Recommended Use** For Further Manufacturing Use Only.

**Uses advised against** Not for Human or Animal Drug Use

### Details of the supplier of the safety data sheet

<b>Company Address</b>	<b>Manufacturer Address</b>
VWR International, LLC	VWR International, LLC
Radnor Corporate Center	28600 Fountain Parkway
100 Matsonford Road	Solon, Ohio 44139
Radnor, PA 19087-8660	

**Company Phone Number** 1-800-448-4442

**E-mail Address** info@amresco-inc.com

### Emergency Telephone Number

**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 3

### Label elements

### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

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

**Appearance** White**Physical State** Crystalline Powder**Odor** No information available**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
In case of inadequate ventilation wear respiratory protection  
Contaminated work clothing should not be allowed out of the workplace  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash before reuse  
If skin irritation or rash occurs: Get medical advice/attention  
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

• May be harmful if inhaled

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Ammonium persulfate	7727-54-0	231-786-5	95-100	Not applicable

**4. FIRST AID MEASURES****First Aid Measures****Eye Contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.  
Consult a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation**

Move to fresh air. If not breathing, give artificial respiration.

**Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth.

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

**Most Important Symptoms/Effects** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

This is a strong oxidizer and will react vigorously or explosively with many materials including fuels.

**Hazardous Combustion Products** Carbon oxides. Emits toxic fumes.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal protection** Use personal protective equipment. Ensure adequate ventilation.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Cover with dry lime or soda ash. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling** Mixing a solution of ammonium persulfate with powdered aluminum or iron may result in an explosion.  
Violent reaction results from silver-catalyzed oxidation of ammonia to nitrogen.  
The salt exploded during drying due possibly to the formation of tetraaminezinc peroxodisulfate from the interaction of ammonium persulfate with galvanised iron and ammonia.  
A mixture with sodium peroxide explodes from friction due to grinding in a mortar, when heated above 75 C or on exposure to carbon dioxide or drops of water.  
Catalytic decomposition can occur in the presence of metals such as lead, silver, copper, magnesium, zinc, cadmium, nickel, iron and cobalt. Handle in accordance with good

industrial hygiene and safety practice.

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

**Storage** Hygroscopic. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Products** Strong reducing agents. Finely powdered metals. Organic materials.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium persulfate 7727-54-0	-	-	-

#### Appropriate engineering controls

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Safety glasses with side-shields. Avoid contact with eyes.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<b>Physical State</b>	Crystalline Powder	<b>Odor</b>	No information available
<b>Appearance</b>	White	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	>93.3 °C	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	Very soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	

Dynamic viscosity No information available  
 Explosive Properties No information available  
 Oxidizing Properties Strong oxidizer

**Other Information**

Softening Point No information available  
 Molecular Weight No information available  
 VOC Content No information available  
 Density No information available  
 Bulk Density No information available

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to Avoid**

Hygroscopic.

**Incompatible Materials**

Strong reducing agents. Finely powdered metals. Organic materials.

**Hazardous Decomposition Products**

Nitrogen oxides (NOx). Sulfur oxides. Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information** Causes skin, eye and respiratory tract irritation Sensitizer

**Inhalation** There is no data available for this product.

**Eye Contact** There is no data available for this product.

**Skin Contact** There is no data available for this product.

**Ingestion** There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium persulfate 7727-54-0	= 495 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	= 520 mg/L ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium persulfate 7727-54-0	-	-	-	-

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Eyes, Lungs, Nose, Throat.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Ammonium persulfate 7727-54-0	-	103: 96 h Lepomis macrochirus mg/L LC50 static 76.3: 96 h Oncorhynchus mykiss mg/L LC50 static 323: 96 h Poecilia reticulata mg/L LC50	120: 48 h Daphnia magna mg/L EC50

**Persistence and Degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

Chemical Name	Partition coefficient
Ammonium persulfate 7727-54-0	-

**Other Adverse Effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Ammonium persulfate 7727-54-0	-	-	-	-

Chemical Name	California Hazardous Waste Status
Ammonium persulfate 7727-54-0	-

## 14. TRANSPORT INFORMATION

**DOT**

UN/ID no. 1444  
Proper shipping name Ammonium Persulfate  
Hazard Class 5.1  
Packing Group III

**IATA**

UN/ID no. 1444  
Proper shipping name Ammonium Persulfate  
Hazard Class 5.1  
Packing Group III

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<b>Component</b>	<b>SARA 313 - Threshold Values %</b>
Ammonium persulfate 7727-54-0 ( 95-100 )	1.0

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	Yes

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<b>Chemical Name</b>	<b>CWA - Reportable Quantities</b>	<b>CWA - Toxic Pollutants</b>	<b>CWA - Priority Pollutants</b>	<b>CWA - Hazardous Substances</b>
Ammonium persulfate 7727-54-0	-	-	-	-

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<b>Chemical Name</b>	<b>Hazardous Substances RQs</b>	<b>Extremely Hazardous Substances RQs</b>	<b>RQ</b>
Ammonium persulfate 7727-54-0	-	-	-

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Ammonium persulfate - 7727-54-0	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ammonium persulfate 7727-54-0	X	-	-

**U.S. EPA Label Information****EPA Pesticide Registration Number** Not regulated**16. OTHER INFORMATION****Issuing Date** 15-Jun-2009**Revision Date** 08-Jan-2016**Revision Note**

Update to Format

**Disclaimer**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

**End of Safety Data Sheet**