

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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Potassium Persulfate, ACS	
NCL Catalog Number	P-90	
Product Description	Laboratory chemical	
Manufacturer	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
Supplier	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: nclabs@nclabs.com	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
Skin Irritation	Category 2
Eye Irritation	Category 2A
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Specific Target Organ Toxicity	Single Exposure Category 3



Signal Word

Danger

Hazard Statements

H272	May intensify fire; oxidizer.
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.

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.
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.
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.
P312	Call a POISON CENTER or doctor if you feel unwell.
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.
Other Hazards Not Contributing to the Classification	None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Formula	K ₂ S ₂ O ₈
Synonym	Potassium peroxodisulfate

Substance

Name	CAS #	Approximate %
Potassium Persulfate	7727-21-1	100

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

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

Most Important Symptoms/Effects Acute and Delayed

No additional information available.

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

Personal Precautions	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Ventilate area.
Environmental Precautions	Prevent entry to surface and ground waters.
Methods and Materials for Containment and Cleaning Up	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

Precautions for Safe Handling	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.
Conditions for Safe Storage Including any Incompatibilities	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

Potassium Persulfate (7727-21-1)		
USA ACGIH	ACGIH TLV (mg/m ³)	0.1 mg/m ³

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

Avoid all unnecessary exposure.

Eye/Face Protection

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

Physical State	Solid
Color	White
Odor	Odorless
Odor Threshold	Not determined
pH	2.5-4.5 at 27 g/l at 25°C (77°F)
Melting Point/Freezing Point	100 °C
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	9.33 (Air =1.0)
Relative Density	2.477 g/cm ³
Solubility	27 g/l at 20°C (68°F) – Completely soluble
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined

Viscosity Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity No data available.

Chemical Stability May decompose on exposure to moist air or water. Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions No data available.

Conditions to Avoid Exposure to moisture and heat.

Incompatible Materials Organic materials, strong reducing agents, powdered metals, strong bases, alcohols, phosphous, anhydrides, halogens, and acids.

Hazardous Decomposition Products No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Harmful if swallowd.
Potassium Persulfate (7727-21-1)	
LD50 oral rat	825 mg/kg
LD50 dermal rabbit	>10,000 mg/kg
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	May cause respiratory irritation.
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity – Water	Not classified
Potassium Persulfate (7727-21-1)	
LC50 fish	76.3 mg/l: 96 h
EC50 Daphnia	120 mg/l: 48 h (Daphnia magna)
EC50 bacteria	83.7 mg/l: 72 h
Persistence and Degradability	Not applicable
Bioaccumulative Potential	Not applicable
Mobility in Soil	Not applicable
Other Adverse Effects	Avoid release to the environment.

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 1492

UN Shipping Name Potassium 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

Potassium Persulfate (7727-21-1)	
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: 02/20/2015

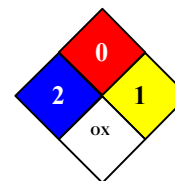
NFPA Hazards

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 1: Normally stable, but can become unstable at elevated temperatures and pressures.

Special Hazard OX: Strong Oxidizer



HMIS III Rating

Health 2: Temporary or minor injury may occur.

Flammability 0: Materials that will not burn.

Physical Hazard 1: Materials that are normally stable but can become unstable at high temperatures and pressure.

Personal Protection C

P-90	
Health	2
Flammability	0
Physical Hazard	1
Personal Protection	C

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END OF SAFETY DATA SHEET