



Material Safety Data Sheet

Potassium persulfate, 5% w/v

Section 1 - Chemical Product and Company Identification

MSDS Name:

Potassium persulfate, 5% w/v

Catalog Numbers:

LC20080

Synonyms:

potassium peroxydisulfate

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
7727-21-1	Potassium persulfate	5

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless

Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: none known.

Potential Health Effects

Eye:

May cause irritation to eyes with pain, lacrimation and photophobia.

Skin:

May cause irritation to skin with brown or yellow stains.

Ingestion:

Ingestion may cause irritation to mouth, mucous membranes, and gastrointestinal tract.



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Inhalation:

May cause irritation to respiratory tract including coughing, choking, headache, nausea.

Chronic:

May cause dermatitis and conjunctivitis. Prolonged inhalation may cause erosion of teeth, inflammation of mucous membranes, and ulceration of the mouth.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion:

If victim is conscious, give 2-4 glasses of water to dilute acid. Dilute acid about 100 times to render harmless to tissue.

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Move container if possible, avoid breathing vapors or dust. Contact with easily oxidizable, organic, or other combustible materials may result in ignition, violent combustion, or explosion.

Extinguishing Media:

Use water only! Cool containers with flooding quantities of water until well after fire is out. Dry potassium persulfate is an oxidizer. Upon heating, it decomposes to yield oxygen or other gases which will increase the burning rate of combustible materials.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 7727-21-1: Not published.

Explosion Limits:

Lower: Upper:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



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Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Do not store near combustible materials. Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium persulfate	0.1 mg/m ³ TWA	None of the components are on this list.	None of the components are on this list.

OSHA Vacated PELs

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Any type C supplied-air respirator with full facepiece. Any self-contained breathing apparatus with full facepiece.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: colorless

Odor: odorless

pH: acidic

Vapor Pressure: No information found.

Vapor Density: > air

Evaporation Rate: < ether

Viscosity: No information found.

Boiling Point: > 212°F (> 100.00°C)



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Freezing/Melting Point: < 32°F (< 0.00°C)

Decomposition Temperature: No information found.

Solubility in water: Soluble.

Specific Gravity/Density: 1.1

Molecular Formula: No information found.

Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Solution slowly decomposes to yield oxygen and sulfuric acid with an increase in pressure to container.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Strong acids, strong bases, reducing agents.

Hazardous Decomposition Products

Oxides of sulfur, oxides of potassium.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 7727-21-1: SE0400000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 7727-21-1:

Oral, rat: LD50 = 802 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7727-21-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found.

Teratogenicity:

No information found.

Reproductive:

No information found.

Mutagenicity

No information found.

Neurotoxicity

No information found.



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Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7727-21-1 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

None of the components are on this list.

CERCLA/SARA Section 313

None of the components are on this list.

OSHA - Highly Hazardous

None of the components are on this list.

US State

State Right to Know

Potassium persulfate can be found on the following state Right-to-Know lists: New Jersey, Florida, Pennsylvania, Massachusetts.

California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7727-21-1 is listed on Canada's DSL List.

Canada Ingredient Disclosure List

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7727-21-1 is not listed on Canada's Ingredient Disclosure List.



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Section 16 - Other Information

MSDS Creation Date: August 17, 1998

Revision Date: September 9, 2004

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