

Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

Revision Date: 2012-05-21
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 3864B-0 Phenol Reagent B

Application: Determination of Phenol in Water Samples

Company Information (USA):

Hanna Instruments, Inc.
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information:

1-800-426-6287 (8:30AM - 5:00PM ET)
+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information:

1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information:

+1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address:

tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Contact with combustible material may cause fire. Harmful if swallowed. Irritating to eyes. May cause sensitization by inhalation and skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Potassium Peroxodisulfate EDTA Tetrasodium Salt Dihydrate

EC-No.: 231-781-8 200-573-9

CAS-No.: 7727-21-1 10378-23-1

Hazard: O, Xn, Xi Xn

Phrases: R: 8-22-36/37/38-42/43 R: 22-36-52/53

Content: > 1% - < 15% > 90%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Give artificial respiration if victim is not breathing. Give oxygen if breathing is difficult.

After Skin Contact: Flush affected area with copious amounts of water for at least 15 minutes.

After Eye Contact: Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After Swallowing: Make victim drink plenty of water, induce vomiting, call in physician.

General Information: Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water Spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam

Special Risks:

Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in event of fire: Nitrogen Oxides, Sulfur Oxides

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Contain escaping vapors with water. Prevent fire-fighting water from entering surface water or ground water.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid generation of dusts. Do not inhale dusts. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.

Environmental Precautions:

Do not discharge into the drains/surface waters/groundwater.

Additional Notes:

Take up dry. Clean up affected area and dispose according to local regulation.

SECTION 7: HANDLING AND STORAGE

Handling:

Avoid generation of dusts. Use appropriate personal protective equipment. Accessible only for authorized persons.

Storage:

Store away from combustible materials and sources of ignition and heat. Protect from moisture.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Potassium Persulfate					
TWA (8hr)	0.1 mg persulfate/m ³	Canada (Ontario)	TWA (8hr)	0.1 mg/m ³	Poland
TWA (8hr)	0.1 mg/m ³	Spain	TWA (8hr)	1 mg/m ³	UK

Engineering:

Safety shower and eye wash.

Personal Protective Equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be determined with the respective supplier.

Respiratory Protection:

Required when dusts are generated.

Protective Gloves:

Compatible chemical-resistant gloves

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Application of skin-protective barrier cream recommended. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	White powder	Odor:	Odorless	Density at 20°C:	ND
Melting Point:	ND	Boiling Point:	NA	Solubility:	ND
pH at 20°C:	~ 10.5 at 10 g/L in water	Explosion Limit:	NA	Flash Point:	NA
Thermal Decomp.:	NA				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Combustible substances, reducing agents, peroxides, water, bases, strong alkalis, acids, metals and heavy metals, silver compounds

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SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

Quantitative data on the toxicity of this product is not available.

Potential Health Effects:

- Inhalation:** Mucosal irritations, coughing, dyspnoea. Possible damages: pulmonary oedema. Risk of airways sensitization.
Skin Contact: Slight irritations. Risk of skin sensitization.
Eye Contact: Irritations.
Ingestion: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
Further Data: Further hazardous properties cannot be excluded. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity:

Potassium Persulfate

LD50: Oral - Rat - 802 mg/kg

Chronic Toxicity:

Not Available

Additional Data:

APPLICABLE TO PARTIAL COMPONENT:

The following applies to EDTA tetrasodium salt dihydrate, as the pure substance:

Acute toxicity

LD50 (oral, rat): 1000-2000 mg/kg.

Specific symptoms in animal studies:

Eye irritation test (rabbit): Irritations.

Skin irritation test (rabbit): No irritation.

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Potassium peroxodisulfate, as the pure substance:

Subacute to chronic toxicity

Sensitization:

Experience in man: May cause sensitization.

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the toxicity of this product is not available.

APPLICABLE TO PARTIAL COMPONENT:

The following applies to EDTA tetrasodium salt dihydrate – as the pure substance:

Ecotoxic effects:

Biological effects:

Harmful effect on aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Fish toxicity: *L. idus* LC50 : >500 mg/L /96 h.

Daphnia toxicity: *Daphnia magna* EC50 : >100 mg/L /24 h.

Algal toxicity: algae IC50 : 10-100 mg/L /72 h.

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Potassium peroxodisulfate – as the pure substance:

Biologic degradation:

Methods for the determination of biodegradability are not applicable to inorganic substances.

Ecotoxic effects:

Biological effects:

Reacts with water to form toxic decomposition products.

Fish toxicity: *P. reticulata* LC50: 100 mg/L /96 h.

Daphnia toxicity: *Daphnia magna* EC50: 357 mg/L /24 h.

Bacterial toxicity: *Ps. putida* EC50: 36 mg/L.

Further ecologic data:

Do not allow to enter waters, waste water, or soil!

Further Data: A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal. Do not allow to enter waters, waste waters, or soil!

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: TRANSPORTATION INFORMATION

	Land (ADR/RID):	Sea (IMDG):	Air (ICAO/IATA):
UN No.:	1492	1492	1492
Proper Shipping Name:	Potassium persulphate mixture	Potassium persulphate mixture	Potassium persulphate mixture
Class (Sub Risk):	5.1	5.1	5.1
Packing Group:	III	III	III

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: O: Oxidizer
Xn: Harmful

R-phrases: 8-22-36-42/43-52/53: Contact with combustible material may cause fire. Harmful if swallowed. Irritating to eyes. May cause sensitization by inhalation and skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases: 26-37: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves.

Contains: Potassium Peroxodisulfate
EDTA tetrasodium salt dihydrate

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

8: Contact with combustible material may cause fire.
22:Harmful if swallowed.
36/37/38:Irritating to eyes, respiratory system and skin.
42/43:May cause sensitization by inhalation and skin contact.
52/53:Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Revision Information

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Legend

NA: Not Applicable
ND: Not Determined

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.