

Revision Date: 2012-05-16
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 3857A-0 Detergents Reagent A

Application: Determination of Detergents 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

Irritating to eyes and skin.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Phosphoric Acid

EC-No.: 231-633-2

CAS-No.: 7664-38-2

Hazard: C

Phrases: R: 34

Content: > 10% - < 25%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Call a physician if breathing becomes difficult.

After Skin Contact: Wash affected area with water and soap.

After Eye Contact: Rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.

After Swallowing: Wash out mouth with plenty of water, provided person is conscious. Obtain medical attention if feeling unwell.

General Information: Not available

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. Hydrogen may form upon contact with metals (danger of explosion!). The following may develop in event of fire: Phosphorus Oxides

Special Protective Equipment:

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

Additional Information:

Product itself is non-combustible. Cool container with spray water from a safe distance. Contain escaping vapors with water. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation.

Environmental Precautions:

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

Additional Notes:

Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand, or sodium carbonate.

SECTION 7: HANDLING AND STORAGE

Handling:

Avoid generation of vapors/aerosols. Do not inhale substance.

Storage:

Tightly closed. In a well-ventilated place at +15 to +25 °C, protected from light.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Phosphoric Acid					
TWA (8hr)	1 mg/m ³	Canada (Ontario)	TWA (8hr)	1 mg/m ³	Canada (Quebec)
TWA (8hr)	1 mg/m ³	Hungary	TWA (8hr)	1 mg/m ³	Poland
TWA (8hr)	1 mg/m ³	Romania	TWA (8hr)	1 mg/m ³	USA (ACGIH)
TWA (8hr)	1 mg/m ³	USA (OSHA)			

Engineering:

Maintain general industrial hygiene practice.

Personal Protective Equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

Respiratory Protection:

Required when vapors/aerosols are generated.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid	Odor:	Odorless	Density at 20°C:	1.09 g/cm ³
Melting Point:	ND	Boiling Point:	ND	Solubility:	Soluble
pH at 20°C:	< 1	Explosion Limit:	NA	Flash Point:	NA
Thermal Decomp.:	ND				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Strong Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Hygroscopic

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Bases, metallic oxides, metals, metal alloys: formed could be: hydrogen

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

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

Potential Health Effects:

- Inhalation:** Irritation symptoms in the respiratory tract.
Skin Contact: Severe irritations.
Eye Contact: Severe irritations.
Ingestion: Burns, strong pain (risk of perforation!). Systemic effects: shock, spasms.
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:

Chronic Toxicity:

Not Available

Phosphoric Acid

LD50: Oral - Rat - 1530 mg/kg

LD50: Dermal - Rabbit - 2740 mg/kg

Additional Data:

APPLICABLE TO MAIN COMPONENT:
The following applies to Phosphoric acid, as the pure substance:
Specific symptoms in animal studies:
Eye irritation test (rabbit): burns.
Skin irritation test (rabbit): burns.
Subacute to chronic toxicity
Sensitization:
Experience in man: No sensitizing potential.
Bacterial mutagenicity: Ames test: negative.

SECTION 12: ECOLOGICAL INFORMATION

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

APPLICABLE TO MAIN COMPONENT: the following applies to Phosphoric acid, as the pure substance:

Biologic degradation:

Inorganic substance. Does not cause biological oxygen deficit.

Ecotoxic effects:

Biological effects:

Harmful effect on aquatic organisms. Caustic even in diluted form. Harmful effect due to pH shift.

Fish toxicity: *Gambusia affinis* LC50: 138 mg/L /96 h (calculated on the pure substance).

aquatic organisms LC50: 100-1000 mg/L /96 h (calculated on the pure substance).

Bacterial toxicity: activated sludge EC50: 270 mg/L (calculated on the pure substance).

Further ecologic data:

Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies.

Further Data: Do not allow to enter waters, waste waters, or soil!

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:**

Not subject to transport regulations

Sea:

Not subject to transport regulations

Air:

Not subject to transport regulations

SECTION 15: REGULATORY INFORMATION**Labeling according to EC Directives:****Symbol:** Xi: Irritant**R-phrases:** 36/38: Irritating to eyes and skin.**S-phrases:** 26-36: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.**SECTION 16: OTHER INFORMATION****Text of R-phrases under Section 3**

34: Causes burns.

Revision Information**Revision Date:** 2012-05-16**Supersedes edition of:** 2009-06-10**Reason for revision:** Section 14 Updated**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.