



PEWA  
Messtechnik GmbH  
Weidenweg 21  
58239 Schwerte  
Tel.: 02304-96109-0  
Fax: 02304-96109-88  
E-Mail: info@pewa.de  
Homepage: www.pewa.de

**HI 70459**  
**0.05M H2SO4 Titration Solution**  
**Safety Data Sheet**

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

**Revision Date:** 2009-06-10  
**Reason for Revision:** 29 CFR 1910.1200 and SOR/88-66 Compliance

**SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY**

**Product Name:** HI 70459 0.05M H2SO4 Titration Solution

**Application:** Titration Reagent

**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**

Non-hazardous product as specified in Directives 67/548/EEC and 1999/45/EC.  
Non-hazardous product as specified in OSHA Regulation 29 CFR 1910.1200.  
Non-hazardous product as specified in Canadian Regulation SOR/88-66.

**SECTION 3: COMPOSITION AND COMPONENT INFORMATION**

Aqueous Solution

**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:** Immediately make victim drink plenty of water (if necessary several liters). Summon doctor.

**General Information:** Not available

**SECTION 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:**

Water Spray, Foam, Dry Powder, Carbon Dioxide

**Special Risks:**

Non-combustible. Development of hazardous combustion gases or vapors possible in the event of fire. The following may develop in the event of fire: 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.

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Do not inhale vapors/aerosols.

**Environmental Precautions:**

NA

**Additional Notes:**

Take up with liquid-absorbent material. Forward for disposal. Clean up affected area. Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand, or sodium carbonate.

**SECTION 7: HANDLING AND STORAGE****Handling:**

Cannot be stored indefinitely.

**Storage:**

Tightly closed. In a well-ventilated place. At +15°C to +25°C.

**SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION****Engineering:**

Maintain general industrial hygiene practice.

**Personal Protective Equipment:**

As appropriate to quantity 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:** 1.00 g/cm<sup>3</sup>**Melting Point:** NA**Boiling Point:** > 100 °C**Solubility:** Soluble**pH at 20° C:** < 2**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:**

Strong alkalis/bases

### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Product Toxicity**

Acute toxicity

LD50 (oral, rat): 2140 mg/kg (Using 25 % solution).

LC50 (inhalation, rat): 510 mg/m<sup>3</sup> /2 h (calculated on the pure substance).

Further toxicological information

Data on the toxicity of this strongly diluted sulfuric acid are not available.

After skin contact: under certain circumstances repeated skin contact may cause dermatitis or may cause irritative symptoms.

After eye contact: intensive exposure may cause irritative symptoms.

#### **Potential Health Effects:**

**Further Data:** The product should be handled with the usual care when dealing with chemicals.

#### **Component Toxicity**

##### **Acute Toxicity:**

Not Available

##### **Chronic Toxicity:**

Not Available

##### **Additional Data:**

Not Available

### **SECTION 12: ECOLOGICAL INFORMATION**

Biologic degradation:

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

Behavior in environmental compartments:

Concentration in organisms is not to be expected.

Ecotoxic effects:

Biological effects: Harmful effect on aquatic organisms. Harmful effect due to pH shift. Toxic effect on fish and algae. Caustic even in diluted form. Does not cause biological oxygen deficit. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities.

Neutralization possible in waste water treatment plants.

Daphnia toxicity: Daphnia magna EC50: 29 mg/L /24 h (calculated on the pure substance).

**Further Data:** Do not allow to enter waters, waste water, 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:**

Non-hazardous according to Directives 67/548/EEC and 1999/45/EC.

## Safety Data Sheet

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### **SECTION 16: OTHER INFORMATION**

***Text of R-phrases under Section 3***

NA

***Revision Information***

**Revision Date:** 2009-06-10

**Supersedes edition of:** 2008-12-01

**Reason for revision:** 29 CFR 1910.1200 and SOR/88-66  
Compliance

***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.**