



HI 84442-55
Pump Calibration Solution
Safety Data Sheet

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

Revision Date: 20123-07-11

Reason for Revision: Regulation (EC) No. 1272/2008 Compliance

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 84442-55 Pump Calibration Solution

Application: Determination of Titratable Alkalinity

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.

Non-hazardous product as specified in Regulation (EC) 1272/2008.

According to Directives 67/548/EEC and 1999/45/EC:

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

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component:	EC No:	CAS No:	Hazard Class:	Phrases:	Concentration:
Sodium hydroxide	215-185-5	1310-73-2	Skin Corr. 1A C	H314 R: 35	< 0.5%
Sodium Carbonate	207-838-8	497-19-8	Eye Irrit. 2 Xi	HI319 R: 36	< 1 %

SECTION 4: FIRST AID MEASURES

After Inhalation: Fresh air. Summon doctor.

After Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing.

After Eye Contact: Rinse out with plenty of water with the eyelid held wide open.

After Swallowing: Drink plenty of water. Seek medical advice.

General Information: Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

Special Risks:

Non-combustible. Ambient fire may liberate hazardous vapors.

Special Protective Equipment:

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

Additional Information:

None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

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

Environmental Precautions:

None

Additional Notes:

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

SECTION 7: HANDLING AND STORAGE

Handling:

Accessible only for authorized persons.

Storage:

Tightly closed. Store at room temperature (+15°C to +25°C).

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

<i>Type</i>	<i>Value</i>	<i>Source</i>	<i>Type</i>	<i>Value</i>	<i>Source</i>
Sodium Carbonate, Anhydrous					
TWA (8hr)	1 mg/m ³	Romania			
Sodium Hydroxide					
Ceiling	2 mg/m ³	Belgium	Ceiling	2 mg/m ³	Canada (Ontario)
Ceiling	2 mg/m ³	Canada (Quebec)	TWA (8hr)	2 mg/m ³	France
TWA (8hr)	2 mg/m ³	Greece	TWA (8hr)	2 mg/m ³	Hungary
TWA (8hr)	0.5 mg/m ³	Poland	Ceiling	2 mg/m ³	Portugal
TWA (8hr)	1 mg/m ³	Romania	Ceiling	2 mg/m ³	Spain
TWA (15min)	2 mg/m ³	UK	Ceiling	2 mg/m ³	USA (ACGIH)
TWA (8hr)	2 mg/m ³	USA (OSHA)			

Engineering:

Maintain general industrial hygiene practice.

Personal Protective Equipment:

As appropriate to quantity handled.

Respiratory Protection:

Required when vapors/aerosols are generated. Work under hood.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Immediately change contaminated clothing. Use the safety shower and eye bath. Apply skin-protective barrier cream. Wash hands and face after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

<i>Appearance:</i>	Colorless liquid	<i>Odor:</i>	Odorless	<i>Density at 20°C:</i>	1.00 g/cm ³
<i>Melting Point:</i>	ND	<i>Boiling Point:</i>	ND	<i>Solubility:</i>	Soluble
<i>pH at 20°C:</i>	~8	<i>Explosion Limit:</i>	NA	<i>Flash Point:</i>	NA
<i>Thermal Decomp.:</i>	NA				

SECTION 10: STABILITY AND REACTIVITY**Conditions to be Avoided:**

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

NA

Substances to be Avoided:

None

SECTION 11: TOXICOLOGICAL INFORMATION**Product Toxicity**

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

Potential Health Effects:**Skin Contact:** Irritations**Eye Contact:** Irritations**Ingestion:** Irritations of mouth, mucous membrane, esophagus and gastrointestinal tract.**Further Data:** The product should be handled with the care usual when dealing with chemicals.**Component Toxicity****Acute Toxicity:****Chronic Toxicity:**

Not Available

Sodium Carbonate, Anhydrous**LC50:** Inhalation - Rat - 4066 mg/L**LD50:** Oral - Rat - 4090 mg/kg**Additional Data:**

Not Available

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecological effect of this product are not available.

Ecotoxic effects:

Biological effects:

Toxic effect on fish and plankton. Harmful effect due to pH shift. Does not cause biological oxygen deficit. Neutralization possible in waste water treatment plants.

Fish toxicity:

LC50 : 189 mg/l (for sol.1N).

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

Complies with European Regulations (EC) No. 1907/2006 and No. 1272/2008.
Complies with European Council Directives 67/548/EEC and 1999/45/EC.
Complies with OSHA Regulation 29 CFR 1910.1200.
Complies with Canadian Regulation SOR/88-66

SECTION 16: OTHER INFORMATION***Text of phrases under Section 3***

R35: Causes severe burns.
H314: Causes severe skin burns and eye damage.
R36: Irritating to eyes.
H319: Causes serious eye damage

Revision Information

Revision Date: 20123-07-11
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Reason for revision: Regulation (EC) No. 1272/2008
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.**