

World Headquarters
Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

MSDS No: M00491

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Chlorophosphonazo Indicator Solution Pillows

Catalog Number: 2589527

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(Medical and Transportation)
(303) 623-5716 24 Hour Service
(515)232-2533 8am - 4pm CST

MSDS Number: M00491

Chemical Name: Not applicable

CAS Number: Not applicable

Additional CAS No. (for hydrated forms): Not applicable

Chemical Formula: Not applicable

Chemical Family: Not applicable

Intended Use: Laboratory Reagent

2. HAZARDS IDENTIFICATION

GHS Classification:

Hazard categories: Acute Toxicity: Acute Tox. 4-Orl Acute Toxicity: Acute Tox. 4-Derm Skin Corrosion/Irritation: Skin Irrit. 2 Serious Eye Damage/Eye Irritation: Eye Irrit. 2A Respiratory or Skin Sensitization: Skin Sens.1

GHS Label Elements:

WARNING



Hazard statements: Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary statements: Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves / protective clothing / eye protection / face protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Take off contaminated clothing and wash before reuse.

HMIS:

Health: 1

Flammability: 0

Reactivity: 0

Protective Equipment: X - See protective equipment, Section 8.

NFPA:

Health: 1

Flammability: 0

Reactivity: 0

Symbol: Not applicable

WHMIS Hazard Classification: Not applicable

WHMIS Symbols: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

BES Buffer

CAS Number: 10191-18-1

Chemical Formula: C₆H₁₅NO₅S

GHS Classification: Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. H317; STOT Single 3, H335

Percent Range (Trade Secret): < 5.0

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols: Not applicable

Tetramethylammonium Hydroxide

CAS Number: 75-59-2

Chemical Formula: C₄H₁₃NO · 5H₂O

GHS Classification: Acute toxicity 2-oral, H300; Acute toxicity 1-dermal, H310; Skin corrosion 1B, H314

Percent Range (Trade Secret): 1.0 - 10.0

Percent Range Units: weight / volume

PEL: Not established

TLV: Not established

WHMIS Symbols: Corrosive

Hazardous Components according to GHS: No

Demineralized Water

CAS Number: 7732-18-5

Chemical Formula: H₂O

GHS Classification: Not a dangerous substance according to GHS.

Percent Range (Trade Secret): 85.0 - 95.0

Percent Range Units: weight / weight

PEL: Not established

TLV: Not established

WHMIS Symbols: Not applicable

Other component

CAS Number: Not applicable

Chemical Formula: Not applicable.

GHS Classification: Not applicable

Percent Range (Trade Secret): < 0.1

Percent Range Units: weight / volume

PEL: Not established

TLV: Not established

WHMIS Symbols: Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

Advice to doctor: Treat symptomatically.

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Remove contaminated clothing. Wash skin with plenty of water. Call physician if irritation develops.

Inhalation: Remove to fresh air.

Ingestion (First Aid): Do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call physician immediately.

5. FIRE FIGHTING MEASURES

Flammable Properties: Material will not burn. During a fire, corrosive and toxic gases may be generated by thermal decomposition. Material is not classified as flammable according to GHS criteria.

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

Extinguishing Media: Use media appropriate to surrounding fire conditions

Extinguishing Media NOT To Be Used: Not applicable

Fire / Explosion Hazards: None reported

Hazardous Combustion Products: This material will not burn.

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance.

Containment Technique: Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment.

Clean-up Technique: If permitted by regulation, Absorb spilled liquid with non-reactive sorbent material. Sweep up material. Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal refuse. Decontaminate the area of the spill with a soap solution. Otherwise, Dispose of material in government approved hazardous waste facility.

Evacuation Procedure: Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes skin Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Protect from: heat

Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Have an eyewash station nearby. Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: safety glasses with top and side shields

Skin Protection: disposable latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it.

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes skin Wash thoroughly after handling. Protect from: heat

TLV: Not established

PEL: Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark purple liquid

Physical State: Liquid

Molecular Weight: Not applicable

Odor: None

Odor Threshold: Odorless

pH: 7.26 @ 23.4° C (74.1° F)

Metal Corrosivity:

Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.

Steel: 0.002 in/yr

Aluminum: 0.004 in/yr

Specific Gravity/ Relative Density (water = 1; air =1): 1.06

Viscosity: $1 \times 10^{-6} \text{ m}^2/\text{s}$

Solubility:

Water: Soluble

Acid: Soluble

Other: Not determined

Partition Coefficient (n-octanol / water): Not determined

Coefficient of Water / Oil: Not applicable

Melting Point: Not determined

Decomposition Temperature: Not determined

Boiling Point: 98.5° C (209° F)

Vapor Pressure: Not determined

Vapor Density (air = 1): Not determined

Evaporation Rate (water = 1): Not determined

Volatile Organic Compounds Content: Not determined

Flammable Properties: Material is not classified as flammable according to GHS criteria.

Flash Point: Not applicable

Method: Not applicable

Flammability Limits:

Lower Explosion Limits: Not applicable

Upper Explosion Limits: Not applicable

Autoignition Temperature: Not applicable

Explosive Properties:

Not classified according to GHS criteria.

Oxidizing Properties:

Not classified according to GHS criteria.

Reactivity Properties:

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Gas under Pressure:

Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.

Mechanical Impact: None reported

Static Discharge: None reported.

Reactivity / Incompatibility: Incompatible with: acids oxidizers

Hazardous Decomposition: Heating to decomposition releases toxic and/or corrosive fumes of: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

Conditions to Avoid: Extreme temperatures Evaporation Heating to decomposition.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: Not applicable

Toxicologically Synergistic Products: None reported

Acute Toxicity: Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data

ATE oral LD50 = 1825 mg/kg

ATE dermal LD50 = 1342 mg/kg

Specific Target Organ Toxicity - Single Exposure (STOT-SE): Not applicable

Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Not applicable

Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.

Eye Damage: Based on classification principles, the classification criteria are not met.

Sensitization: Contains a sensitizing compound. Skin Sensitizer

CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Unlikely to be a carcinogen

This product does NOT contain any NTP listed chemicals.

This product does NOT contain any OSHA listed carcinogens.

Symptoms/Effects:

Ingestion: None reported

Inhalation: No data reported.

Skin Absorption: None Reported

Chronic Effects: None reported

Medical Conditions Aggravated: None reported

12. ECOLOGICAL INFORMATION

Product Ecological Information: --

No ecological data available for this product.

Ingredient Ecological Information: --

No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): If permitted by regulation, Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Otherwise, Dispose of material in an E.P.A. approved hazardous waste facility.

Empty Containers: Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P. A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:

D.O.T. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

T.D.G.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA

Subsidiary Risk: NA

UN Number/PIN: NA

Packing Group: NA

I.C.A.O.:

I.C.A.O. Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

I.M.O.:

Proper Shipping Name: Not Currently Regulated

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Hazard Class: NA

Subsidiary Risk: NA

ID Number: NA

Packing Group: NA

Marine Pollutant:

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:

S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard

S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.

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302 (EHS) TPQ (40 CFR 355): Not applicable

304 CERCLA RQ (40 CFR 302.4): Not applicable

304 EHS RQ (40 CFR 355): Not applicable

Clean Water Act (40 CFR 116.4): Not applicable

RCRA: Contains no RCRA regulated substances.

State Regulations:

California Prop. 65: No Prop. 65 listed chemicals are present in this product.

Identification of Prop. 65 Ingredient(s): None

California Perchlorate Rule CCR Title 22 Chap 33: Not applicable

Trade Secret Registry: Not applicable

National Inventories:

U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).

CAS Number: Not applicable

Canadian Inventory Status: All ingredients of this product are DSL/NDSL Listed.

EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.

Australian Inventory (AICS) Status: All ingredients are listed.

New Zealand Inventory (NZIoC) Status: All components either listed or exempt.

Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.

Japan (ENCS) Inventory Status: All components either listed or exempt.

China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION

References: TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. Technical Judgment. Vendor Information. NIOSH Registry of Toxic Effects of Chemical Substances, 1985-86. Cincinnati: U.S. Department of Health and Human Services, April, 1987. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989.

Complete Text of H phrases referred to in Section 3: H300 Fatal if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction.

Revision Summary: . Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:

Day: 23

Month: July

Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:

NA - Not Applicable	w/w - weight/weight
ND - Not Determined	w/v - weight/volume
NV - Not Available	v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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