

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2012 and GHS Rev 10.

Issue date 12/09/2023 Reviewed on 10/22/2025

1 Identification

- **Product Identifier**
- **Trade Name:** INSTRUMENTATIONHUB PS-CAL-1 & PS-CAL-2 pH Calibration Solution Set
- **Product Number:** PS-CAL-1 / PS-CAL-2
- **Relevant identified uses of the substance or mixture and uses advised against:** Lab/Field use only
- **Product Description:**

PS-CAL-1

Solution 1: pH Calibration Solution pH 4.00 @ 20C, 500mL (16.907 fl oz)

Solution 2: pH Calibration Solution pH 7.00 @ 20C, 500mL (16.907 fl oz)

Solution 3: pH Calibration Solution pH 10.00 @ 20C, 500mL (16.907 fl oz)

PS-CAL-2

Solution 1: pH Calibration Solution pH 4.00 @ 20C, 250mL (8 fl oz)

Solution 2: pH Calibration Solution pH 7.00 @ 20C, 250mL (8 fl oz)

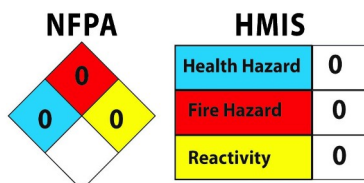
Solution 3: pH Calibration Solution pH 10.00 @ 20C, 250mL (8 fl oz)

- **Application of the substance / the mixture:** Buffers, Filling & Calibration Solutions
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
COREIPM LLC
INSTRUMENTATIONHUB Division
PO BOX 7156
NASHUA, NH 03060
603-617-2064
www.instrumentationhub.com
- **Emergency telephone number:** 603-617-2064

2 Hazard(s) Identification

- **Classification of the substance or mixture:**

The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 10.



Hazard Statements:

H316 Causes mild skin irritation

H320 Causes eye irritation

Precautionary Prevention:

P264: Wash hands thoroughly after handling.

P265: Do not touch eyes.

Precautionary Response:

P332+P317: If skin irritation occurs: Get medical help.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+P317: If eye irritation persists: Get medical help.

3 Composition/Information on Ingredients**pH4 Ingredients:**

Water (CAS 7732-18-5) 99.2%

Potassium Hydrogen Phthalate (CAS 877-24-7) 0.8%

FDC Red #4 colorant

pH7 Ingredients

Water (CAS 7732-18-5) 99.2%

Potassium Phosphate (CAS 7778-77-0) 0.7%

Sodium Hydroxide (CAS 1310-73-2) 0.1%

FDC Yellow #5 colorant

pH10 Ingredients

Water (CAS 7732-18-5) 99.2%

Sodium Tetraborate Decahydrate (CAS 1303-96-4) 0.7%

Sodium Hydroxide (CAS 1310-73-2) 0.1%

FDC Blue #1 colorant

Water-react. 1, H260; Skin Corr. 1B, H314

- **Chemical characterization:** Substance
- **Description:** Non-Regulated Material
- **Dangerous Components:** Non-Regulated Material

4 First-Aid Measures**Hazard Statements:**

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Precautionary Prevention:

P264: Wash hands thoroughly after handling.

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Precautionary Response:

P332+P317: If skin irritation occurs: Get medical help.

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P337+P317: If eye irritation persists: Get medical help.

5 Fire-Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters**
- **Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Not required. Avoid contact with skin and eyes.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the collected material according to regulations.

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** No special precautions are necessary if used correctly. Avoid contact with skin and eyes.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Components with occupational exposure limits:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Not required.
- **Material of gloves:** Not applicable.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:**
Goggles recommended during use.
- **Limitation and supervision of exposure into the environment:** None

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Liquid

- **Color:** Clear
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value:** 4, 7, 10
- **Change in condition**
- **Melting point/Melting range:** Not determined.
- **Boiling point/Boiling range:** ≥ 100 °C (≥ 212 °F)
- **Flash point:** None
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** Not applicable
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Vapor pressure @ 20 °C (68 °F):** ≤ 23 hPa (≤ 17.3 mm Hg)
- **Density @ 20 °C (68 °F):** 0.9999 g/cm³ (8.3442 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not determined.
- **Evaporation rate:** Not determined.
- **Solubility in / Miscibility with:**
- **Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.
- **Solvent content:**
- **VOC content:** 0.00 %
- **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No data available.
- **Primary irritant effect:**
- **On the skin:** Causes mild skin irritation
- **On the eye:** Causes eye irritation
- **Additional toxicological information:**
- **Carcinogenic categories:**
- **IARC (International Agency for Research on Cancer):**
None of the ingredients are listed.
- **NTP (National Toxicology Program):**
None of the ingredients are listed.
- **OSHA-Ca (Occupational Safety & Health Administration):**
None of the ingredients are listed.

12 Ecological Information

- **Overview:** This material is not expected to be harmful to the ecology.

Toxicity:

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

- **UN-Number:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, ADN, IMDG, IATA**
- Class: Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**
- **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients are listed.
- **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.
- **Hazardous Air Pollutants**
None of the ingredients are listed.

- **California Proposition 65:**
- **Chemicals known to cause cancer:**
None of the ingredients are listed.
- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.
- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.
- **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.
- **New Jersey Right-to-Know List:**
7440-09-7 Potassium chloride
- **New Jersey Special Hazardous Substance List:**
7440-09-7 Potassium chloride F3, R2
- **Pennsylvania Right-to-Know List:**
7440-09-7 Potassium chloride
- **Pennsylvania Special Hazardous Substance List:**
None of the ingredients are listed.
- **Carcinogenic categories:**
- **EPA (Environmental Protection Agency):**
None of the ingredients are listed.
- **TLV (Threshold Limit Value established by ACGIH):**
None of the ingredients are listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health):**
None of the ingredients are listed.
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms:** Non-Regulated Material
- **Signal word:** Non-Regulated Material
- **Hazard statements:** Non-Regulated Material
- **National regulations:**
None of the ingredients are listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

• Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit