1. Identification

Product identifier: pH Indicator Solution (Phenol Red)
Product code: R-0004
Recommended use: Use as directed by manufacturer for purposes directly related to water testing.
Recommended restrictions: None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
Company name: Taylor Technologies, Inc.
Address: 31 Loveton Circle
          Sparks, MD 21152
          United States
Telephone: (410) 472-4340
          Monday–Friday, 8:00 a.m.–4:30 p.m.
Website: www.taylortechnologies.com
E-mail: Not available
Emergency phone number: (800) 837-8548

2. Hazard(s) identification

Physical hazards: This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Health hazards: This mixture does not meet the classification criteria according to OSHA HazCom 2012.
Environmental hazards: Not currently regulated by OSHA. For additional information, refer to section 12 of the SDS.

Label elements: None required

Signal word: None required
Hazard statement: None required
Precautionary statement
  Prevention: None required
  Response: None required
  Storage: None required
  Disposal: None required
Hazard(s) not otherwise classified: None
Supplemental information: None

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized water</td>
<td>Dihydrogen oxide</td>
<td>7732-18-5</td>
<td>90–99</td>
</tr>
<tr>
<td>Trade secret</td>
<td></td>
<td></td>
<td>0.1–5</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>0.1–5</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation: Move to fresh air. Give oxygen or artificial respiration if needed. Get medical attention immediately.
| Skin contact | Immediately wash skin with soap and water. If symptoms persist or in all cases of concern, seek medical advice. |
| Eye contact | Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If symptoms persist or in all cases of concern, seek medical advice. |
| Ingestion | Treat symptomatically. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If symptoms persist or in all cases of concern, seek medical advice. |
| Most important symptoms/effects, acute and delayed | Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. |
| General information | Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves. |

### 5. Firefighting measures

| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Firefighting equipment/instructions | Firefighters should wear full protective gear. Evacuate the area promptly. Fight fire from upwind to avoid exposure to combustion products. Cool containers/tanks with water spray. Do not get water inside container. Move containers from fire area if it can be done without risk. Prevent fire-extinguishing water from contaminating surface water or the ground water system. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | No unusual fire or explosion hazards noted |
| Hazardous combustion products | Carbon oxides. Sulfur oxides. Other irritating fumes and smoke. |

### 6. Accidental release measures

| Personal precautions, protective equipment, and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Large Spills: Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewer, basements, or confined areas. Following product recovery, flush area with water. |
| Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination. |
| Environmental precautions | Avoid discharge into drains, water courses, or onto the ground. |

### 7. Handling and storage

| Precautions for safe handling | Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately. |
8. Exposure controls/personal protection

Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (refer to section 10 of the SDS). Protect against physical damage. Use care in handling/storage.

Occupational exposure limits

<table>
<thead>
<tr>
<th>U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>Trade secret</td>
<td>PEL</td>
<td>22 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
</tr>
<tr>
<td>U.S. ACGIH Threshold Limit Values</td>
<td>Components</td>
<td>Type</td>
</tr>
<tr>
<td>Trade secret</td>
<td>TWA</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalable fraction and vapor</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s)

Exposure guidelines

California OELs: Skin designation
Trade secret Can be absorbed through skin

Minnesota Hazardous Substance: Skin designation
Trade secret Skin designation applies

Tennessee OELs: Skin designation
Trade secret Can be absorbed through skin

U.S. ACGIH Threshold Limit Values: Skin designation
Trade secret Can be absorbed through skin

OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Trade secret Can be absorbed through skin

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles) and a face shield. Provide an emergency eyewash fountain and quick-drench shower in the immediate work area.

Skin protection
Hand protection
Wear appropriate chemical-resistant gloves. Advice should be sought from glove suppliers.

Other
Wear appropriate chemical-resistant clothing.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits. Advice should be sought from respiratory protection suppliers.

Thermal hazards
When necessary, wear appropriate thermal protective clothing.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contamination. Avoid breathing mist or vapor.

9. Physical and chemical properties

Appearance

| Physical state | Liquid |
| Form           | Liquid |
| Color          | Clear red |
| Odor           | Phenolic |
| Odor threshold | Not available |
| pH             | 7.7 |
Melting point/freezing point: Not available
Initial boiling point and boiling range: 212°F (100°C)
Flash point: Not applicable (does not burn)
Evaporation rate: Not available
Flammability (solid, gas): Not applicable
Upper/lower flammability or explosive limits:
- Flammability limit, lower (%): Not applicable
- Flammability limit, upper (%): Not applicable
- Explosive limit, lower (%): Not applicable
- Explosive limit, upper (%): Not applicable
Vapor pressure: 17 mm Hg
Vapor density: 0.6
Relative density: 1.00 g/cm³
Solubility(ies):
- Solubility (water): Soluble in all proportions
Partition coefficient (n-octanol/water): Not available
Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
Viscosity: Not available
Other information:
- Explosive properties: Not applicable
- Oxidizing properties: Not applicable
- Percent volatile: 98%
- Specific gravity: 1.00

10. Stability and reactivity
Reactivity: This product is stable and nonreactive under normal conditions of use, storage, and transport.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Conditions to avoid: Contact with incompatible materials. Do not use in areas without adequate ventilation.
Incompatible materials: Oxidizing agents
Hazardous decomposition products: None known. For hazardous combustion products, refer to section 5 of the SDS.

11. Toxicological information
Information on likely routes of exposure:
- Inhalation: May cause irritation to the respiratory system
- Skin contact: May cause slight or mild transient irritation
- Eye contact: May cause temporary irritation
- Ingestion: May cause discomfort
Most important symptoms/effects, acute and delayed: Direct skin contact may cause slight or mild transient irritation. Symptoms may include redness, edema, drying, and cracking of the skin. Direct eye contact may cause slight or mild transient irritation. Symptoms may include stinging and tearing. Inhalation of mists can cause respiratory irritation. Symptoms may include coughing and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Acute toxicity

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade secret</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>2050 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>Not available</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>242 mg/kg</td>
</tr>
</tbody>
</table>

Deionized water (CAS 7732-18-5)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>Not available</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>Not available</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt;89840 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
May cause slight or mild transient irritation

Serious eye damage/eye irritation
May cause temporary irritation

Respiratory sensitization
Not expected to be a respiratory sensitizer

Skin sensitization
Not expected to be a skin sensitizer

Germ cell mutagenicity
Not expected to be mutagenic

Carcinogenicity
This product is not considered to be a carcinogen by IARC, NTP, OSHA, U.S. ACGIH.

Not regulated

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity, single exposure
Not classified as a specific target organ toxicity – single exposure

Specific target organ toxicity, repeated exposure
Not classified as a specific target organ toxicity – repeated exposure

Aspiration toxicity
Not expected to be an aspiration hazard

Chronic effects
Frequent or prolonged contact may dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity
This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
Not available

Bioaccumulative potential
Not available

Partition coefficient n-octanol / water (log K<sub>ow</sub>)
Trade secret 1.96

Mobility in soil
High water solubility indicates a high mobility in soil.

Other adverse effects
No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion with the user, the producer, and the waste disposal company.
Waste from residues/unused products
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (refer to Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste-handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information

DOT
Not regulated as dangerous goods

IATA
Not regulated as dangerous goods

IMDG
Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
This mixture is not intended to be transported in bulk.

15. Regulatory information

U.S. federal regulations
This product is not known to be a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory list.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated

CERCLA Hazardous Substance (40 CFR 302.4)
Trade secret

SARA 304 Emergency Release Notification
Not regulated

Not regulated

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate hazard – yes
Delayed hazard – no
Fire hazard – no
Pressure hazard – no
Reactivity hazard – no

SARA 302 Extremely Hazardous Substance
Not regulated

SARA 311/312 Hazardous Chemical
Not regulated

SARA 313 (TRI reporting)
Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAP)
Trade secret

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated

Safe Drinking Water Act (SDWA)
Not regulated

U.S. state regulations

California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed

Massachusetts Right-to-Know Act
Trade secret

New Jersey Worker and Community Right-to-Know Act
Trade secret
**Pennsylvania Worker and Community Right-to-Know Act**
Trade secret

**Rhode Island Right-to-Know Act**
Trade secret

**California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International inventories

<table>
<thead>
<tr>
<th>Country(ies) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>no</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>no</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)</td>
<td>yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>no</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>no</td>
</tr>
<tr>
<td>Japan</td>
<td>Existing and New Chemical Substances (ENCS)</td>
<td>no</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory of Chemicals (NZIoC)</td>
<td>yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA)</td>
<td>yes</td>
</tr>
</tbody>
</table>

*A “yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(ies).

A “no” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(ies).

### 16. Other information, including date of preparation or last revision

**List of abbreviations**

- ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- CAA: Clean Air Act
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
- CFR: Code of Federal Regulations
- CSA: Canadian Standards Association
- DEA: Drug Enforcement Agency
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EC: effective concentration
- ECL: Existing Chemicals List
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- ENCS: Existing and New Chemical Substances
- EPA: Environmental Protection Agency
- HAP: hazardous air pollutants
- HMIS: Hazardous Materials Identification System
- HNOC: hazards not otherwise classified
- HPA: Hazardous Products Act
- HSDD: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
- ICAO: International Civil Aviation Organization
- IECS: Inventory of Existing Chemical Substances Produced or Imported in China
- IMDG: International Maritime Dangerous Goods
- IUCLID: International Uniform Chemical Information Database
- LC: lethal concentration
- LD: lethal dose
- MARPOL: marine pollution
- MSHA: Mine Safety and Health Administration
- NDSL: Non-Domestic Substances List
Material name: pH Indicator Solution (Phenol Red); R-0004

Disclaimer

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Last revision
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