SECTION 1 : Identification of the substance/mixture and of the supplier

Product name: Phenolphthalein Indicator Solution,

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: ANDPH1605-P

Recommended uses of the product and restrictions on use:

Manufacturer Details:
AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:
Anderson Chemical Company
325 South David Avenue, Litchfield, MN 55355
(320) 693-2477

Emergency telephone number:
Anderson Chemical Company   Emergency Telephone No.: (800) 255-3924

SECTION 2 : Hazards identification

Classification of the substance or mixture:

- **Irritant**
  - Eye Irritant 2
  - Specific target organ toxicity following single exposure, category 3

- **Flammable**
  - Flammable liquids, category 3

- **Toxic**
  - Acute toxicity (oral, dermal, inhalation), category 3

Eye Irritation 2
Specific Target Organ Toxicity, Single Exposure 3
Acute Toxicity 3 (oral)
Flammable Liquid 3

**Signal word**: Danger

**Hazard statements**:
- Flammable liquid and vapour
- Causes serious eye irritation
- Suspected of causing genetic defects
- May cause cancer
- Suspected of damaging fertility or the unborn child

**Precautionary statements**:
- Obtain special instructions before use
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not handle until all safety precautions have been read and understood
- Keep away from heat/sparks/open flames/hot surfaces – No smoking

Created by Global Safety Management, 1-813-435-5161 - www.GSMSDS.com
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wash hands and forearms thoroughly after handling
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF exposed or concerned: Get medical advice/attention
Specific treatment (see Section 4)
In case of fire: Use media appropriate for extinction
Store locked up
Store in a well ventilated place. Keep cool
Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulation

Hazards Not Otherwise Classified (HNOC):
None
Unknown Acute Toxicity:
No ingredients of unknown acute toxicity

Other Non-GHS Classification:

SECTION 3 : Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 67-56-1</td>
<td>Methanol</td>
<td>12.5 %</td>
</tr>
<tr>
<td>CAS 64-17-5</td>
<td>Ethanol</td>
<td>12.5 %</td>
</tr>
<tr>
<td>CAS 67-63-0</td>
<td>Isopropanol</td>
<td>25 %</td>
</tr>
<tr>
<td>CAS 77-09-8</td>
<td>Phenolphthalein</td>
<td>0.5 %</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

Description of first aid measures

After inhalation: Take affected persons out into the fresh air. Seek immediate medical advice. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration.

After skin contact: Immediately remove any clothing soiled by the product. Flush with water for 15 minutes. Seek immediate medical attention or advice.

After eye contact: Protect unharmed eye. Flush with water for 15 minutes. Seek immediate medical attention or advice.

After swallowing: Do not induce vomiting; call for medical help immediately. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Have exposed individual drink sips of water or milk.

Most important symptoms and effects, both acute and delayed:

Indication of any immediate medical attention and special treatment needed:

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.

For safety reasons unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:
Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters:

Additional information (precautions): Eliminate all ignition sources if safe to do so. Use large quantities of foam as it is partially destroyed by the product.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Avoid contact with skin and eyes, and clothing.

Environmental precautions:
Do not allow to enter sewers. Do not allow to enter surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up:
Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for...
recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to section 13. Used rags or other cleaning materials should be soaked with water and placed in a sealed container. Clean up spills immediately. Always obey local regulations. Wash hands after handling. Avoid contact with skin and eyes.

Reference to other sections:
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment
See Section 13 for disposal information

SECTION 7 : Handling and storage

Precautions for safe handling:
Prevent formation of aerosols. Avoid splashes or spray in enclosed areas. Use only in well ventilated areas. Rags, metal wools / cuttings / shavings and waste papers soaked with product must be placed in a sealed metal container rated for flammable waste. Keep ignition sources away - Do not smoke. Flammable gas-air mixtures may form in empty receptacles. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture

Conditions for safe storage, including any incompatibilities:
Store in a cool location. Provide ventilation for receptacles. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed receptacles. Keep container tightly sealed. Store away from combustible materials. Protect from freezing and physical damage.

SECTION 8 : Exposure controls/personal protection

Control Parameters:
- 67-63-0, Isopropanol, ACGIH TLV: 983mg/m3
- 67-63-0, Isopropanol, OSHA PEL: 980mg/m3
- 64-17-5, Ethanol, OSHA PEL: 1900mg/m3
- 64-17-5, Ethanol, ACGIH TLV: 1880mg/m3
- 67-56-1, Methanol, OSHA PEL: 200ppm
- 67-56-1, Methanol, ACGIH TLV: 200ppm

Appropriate Engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated above. All electrical equipment should comply with the National Electric Code. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapors may be released

Respiratory protection:
Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable

Protection of skin:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
**Eye protection:**
Safety glasses

**General hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin

**SECTION 9 : Physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state,color)</td>
<td>Slight pink liquid</td>
</tr>
<tr>
<td>Explosion limit lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosion limit upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosion hazard</td>
<td>Product does not present</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>33mmHg @ 20C</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild alcohol</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value</td>
<td>Slightly Acidic</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>-88C</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Approx 82C</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammable (solid,gaseous)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid,gaseous)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid,gaseous)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Flammability (solid,gaseous)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Viscosity</td>
<td>a. Kinematic:Not Determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>b. Dynamic: Not determined</td>
</tr>
</tbody>
</table>

**SECTION 10 : Stability and reactivity**

**Reactivity:** Not determined

**Chemical stability:** No decomposition if used and stored according to specifications

**Possible hazardous reactions:** Flammable. Toxic fumes may be released if heated above the decomposition point. Reacts violently with oxidizing agents

**Conditions to avoid:** Keep ignition sources away - Do not smoke. Store away from oxidizing agents. Excess heat.

**Incompatible materials:** Strong acids. Strong bases. Oxidizers, aldehydes, heat, sparks, open flame, metallic oxides.

**Hazardous decomposition products:** Carbon oxides (CO, CO2). Acrid and irritating fumes, including toxic oxides of carbon will heat to combustion.

**SECTION 11 : Toxicological information**

**Acute Toxicity:**

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
<th>Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>83.2 mg/L (Methanol)</td>
<td>LC50 rat</td>
</tr>
<tr>
<td>Oral</td>
<td>5840 mg/kg (Isopropanol)</td>
<td>LD50 rat</td>
</tr>
<tr>
<td>Oral</td>
<td>1 g/kg (Phenolphthalein)</td>
<td>LD50 rat</td>
</tr>
</tbody>
</table>
Phenolphthalein Indicator Solution, 

<table>
<thead>
<tr>
<th>Oral:</th>
<th>7060mg/kg (Ethanol)</th>
<th>LD50-rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral:</td>
<td>5628mg/kg (Methanol)</td>
<td>LD50 rat</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>72.6 mg/L (Isopropanol)</td>
<td>LC50 rat</td>
</tr>
</tbody>
</table>

**Chronic Toxicity:**

| Dermal: | No testing available |
| Oral:   | No testing available  |
| Inhalation: | No testing available |

**Corrosion Irritation:**

| Dermal: | No testing available |
| Ocular: | No testing available  |
| Sensitization: | Not classified |

**Single Target Organ (STOT):**

Not classified

**Numerical Measures:**

ATE: 50ppm

**Carcinogenicity:**

NTP: 1, 3
IARC Group: 2B

**Mutagenicity:**

No additional information.

**Reproductive Toxicity:**

No additional information.

**SECTION 12 : Ecological information**

**Ecotoxicity**

Fish: Not measured
Crustacea: Not measured
Algae: Not measured
Terrestrial: Not measured

**Persistence and degradability:** biodegradable

**Bioaccumulative potential:** No further relevant information available

**Mobility in soil:** No further relevant information available

**Other adverse effects:** No further relevant information available

**SECTION 13 : Disposal considerations**

**Waste disposal recommendations:**

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product. Handle empty containers with care because residual vapors are flammable. Avoid release to the environment. Absorb and containerize for disposal.

**SECTION 14 : Transport information**
UN-Number
UN1993

UN proper shipping name
Flammable Liquids, N.O.S., (Isopropanol)

Transport hazard class(es)
- **Class:**
  - 3 Flammable liquids

Packing group: III

Environmental hazard:

Transport in bulk:
- **Name:** Not applicable
- **Ship type:** Not applicable
- **Pollution category:** Not applicable

Special precautions for user: Warning: Flammable liquids. Danger code (Kemler) 336. EMS Number: F-E, S-D

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**SECTION 15 : Regulatory information**

**United States (USA)**

SARA Section 311/312 (Specific toxic chemical listings):
None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):
- 67-56-1 Methanol

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

**Proposition 65 (California):**

Chemicals known to cause cancer:
- 77-09-8 Phenolphthalein

Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed

Chemicals known to cause developmental toxicity:
- 64-17-5 Ethanol
- 67-56-1 Methanol

**Canada**

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
- 64-17-5 Ethanol
Phenolphthalein Indicator Solution,

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations of this material.

GHS Full Text Phrases:
Acute Tox. 4 (Oral) Acute toxicity (oral) Category 4
H226 Flammable liquid and vapor
H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H341 Suspected of causing genetic defects
H350 May cause cancer
H361 Suspected of damaging fertility or the unborn child
Carc. 1B Carcinogenicity Category 1B
Eye Irrit. 2A Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B Serious eye damage/eye irritation Category 2B
Flam. Liq. 3 Flammable liquids Category 3
Muta. 2 Germ cell mutagenicity Category 2
Repr. 2 Reproductive toxicity Category 2
Skin Irrit. 2 Skin corrosion/irritation Category 2
STOT SE 3 Specific target organ toxicity (single exposure) Category 3

Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
DOT: US Department of Transportation
IATA: International Air Transportation Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)

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