

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.17.2015**Wide Range pH Indicator****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Wide Range pH Indicator**Manufacturer/Supplier Article number:** AR-1031-60 EW**Recommended uses of the product and restrictions on use:** Laboratory Chemicals**Manufacturer Details:**

Aqua Analytics  
39555 Orchard Hill Place, Suite 600, Novi, MI 48375  
(888) 712-4000

**Emergency telephone number:**

Emergency Telephone No.: (800) 424-9300

**SECTION 2: Hazards identification****Classification of the substance or mixture:****Flammable**

Flammable liquids, category 2

**Irritant**

Eye irritation, category 2A

Specific target organ toxicity following single exposure, category 3

**Health hazard**

Germ cell mutagenicity, category 2

Carcinogenicity, category 1B

Reproductive toxicity, category 2

Flammable liq. 2.

Carcin. 1B.

Muta. 2.

Repr Tox. 2.

Eye irrit. 2A.

**Signal word:** Danger**Hazard statements:**

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Suspected of causing genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

**Precautionary statements:**

If medical advice is needed have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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Use personal protective equipment as required.  
 Keep container tightly closed.  
 Ground/bond container and receiving equipment.  
 Use explosion-proof electrical/ventilating/light/.../equipment.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Wash thoroughly after handling.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 In case of fire: Use ... for extinction.  
 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 If eye irritation persists get medical advice/attention.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 IF exposed or concerned: Get medical advice/attention.  
 Store in a well ventilated place. Keep cool.  
 Store in a well ventilated place. Keep container tightly closed.  
 Store locked up.  
 Dispose of contents/container.

**Other Non-GHS Classification:** None**SECTION 3: Composition/information on ingredients****Ingredients:**

<b>Ingredients:</b>		
CAS 64-17-5	Ethanol	>70 %
CAS 77-09-8	Phenolphthalein	<1 %
CAS 845-10-3	Methyl Red, Sodium Salt	<1 %
CAS 34722-90-2	Bromothymol Blue, Sodium Salt	<1 %
CAS 2303-01-7	Metacresol Purple, Sodium Salt	<1 %
Percentages are by weight		

**SECTION 4: First aid measures****Description of first aid measures****After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

**After skin contact:**

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

**After eye contact:**

Protect unexposed eye. Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance. Remove contact lenses, if present and easy to do, and continue rinsing.

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Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Dilute mouth with water or milk after rinsing. Seek medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

Headache. Shortness of breath. May cause burning and stinging irritation and possible damage to cornea and conjunctiva. May cause nausea, vomiting, cramps, and diarrhea. May cause mild irritation of the mucous membrane and upper respiratory tract. May cause damage to central nervous system, eyes, skin, and respiratory system. Results in cracking and burning which may lead to secondary infections and dermatitis.

**Indication of any immediate medical attention and special treatment needed:**

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically. Approximately 250mL (Isopropanol) is the lethal dose for a human adult.

**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Water can be used to dilute to nonflammable mixtures.

**Unsuitable extinguishing agents:** None

**Special hazards arising from the substance or mixture:**

Vapors can flow to distant ignition sources and flashback. Use water spray to cool fire exposed containers, and flush non-ignited spills or vapors away from fire.

**Advice for firefighters:****Protective equipment:**

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

**Additional information (precautions):**

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. Use spark-proof tools and explosion-proof equipment. Ensure that air-handling systems are designed to prevent the escape of dust into the work area.

**Environmental precautions:**

Not relevant considering the small amounts used.

**Methods and material for containment and cleaning up:**

Have fire extinguishing agent available in case of fire. Always obey local regulations. Follow Chemical Hygiene Plan. If necessary use trained response staff or contractor. Wear protective eyewear, gloves, and clothing. Do not flush to sewer. Contain spillage and then collect. Use spark-proof tools and explosion-proof equipment. Refer to Section 8. Refer to Section 13. Remove all sources of ignition. Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Ventilate area of spill.

**Reference to other sections:** None

**SECTION 7: Handling and storage****Precautions for safe handling:**

Wash hands after handling. Use only in well ventilated areas. Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

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Store in a cool location. Store securely in flammable storage area away from sources of ignition. Provide ventilation for containers. Store with like hazards. Keep container tightly closed. Protect from freezing and physical damage. Keep away from food and beverages. Store away from incompatible materials. Store away from combustible materials.

**SECTION 8: Exposure controls/personal protection****Control parameters:**

64-17-5, Ethanol, ACGIH TLV - 1000 ppm STEL.  
64-17-5, Ethanol, OSHA PEL - TWA: 1000 ppm TWA: 1900 mg/m3.

**Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

**Respiratory protection:**

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

**Protection of skin:**

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

**Eye protection:**

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

**General hygienic measures:**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Perform routine housekeeping. Before re-wearing, wash contaminated clothing. The usual precautionary measures are to be adhered to when handling chemicals.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Dark green colored liquid	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	2.0 12.7
<b>Odor:</b>	Mild alcohol	<b>Vapor pressure at 20°C:</b>	Not available
<b>Odor threshold:</b>	Not available	<b>Vapor density:</b>	Not available
<b>pH-value:</b>	Not available	<b>Relative density:</b>	Not available
<b>Melting/Freezing point:</b>	Not available	<b>Solubilities:</b>	Infinite solubility.
<b>Boiling point/Boiling range:</b>	77°C	<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Flash point (closed cup):</b>	15.5°C	<b>Auto/Self-ignition temperature:</b>	Approximately 398°C

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<b>Evaporation rate:</b>	Not available	<b>Decomposition temperature:</b>	Not available
<b>Flammability (solid, gaseous):</b>	Not available	<b>Viscosity:</b>	a. Kinematic: Not available b. Dynamic: Not available
<b>Density at 20°C:</b>	Not available		

**SECTION 10: Stability and reactivity****Reactivity:**

Nonreactive under normal conditions.

**Chemical stability:**

Stable under normal conditions.

**Possible hazardous reactions:**

None under normal processing.

**Conditions to avoid:**

Incompatible materials. Ignition sources. Excessive heat.

**Incompatible materials:**

Oxidizers, aldehydes, heat, sparks, open flame. Metallic oxides may cause ignition.

**Hazardous decomposition products:**

Acrid and irritating fumes, including toxic oxides of carbon will heat to combustion.

**SECTION 11: Toxicological information****Acute Toxicity:****Oral:**

LD50 = 7060 mg/kg ( Rat ) 64-17-5.

**Inhalation:**

LC50 = 124.7 mg/L ( Rat ) 4 h 64-17-5.

**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:**

Skin - Rabbit Result: Mild skin irritation 67-63-0.

**Serious eye damage/irritation:**

Eyes - Rabbit Result: Eye irritation - 24 h 67-63-0.

**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:****IARC: 2B - Group 2B: Possibly carcinogenic to humans.:** CAS: 77-09-8 Phenolphthalein**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:** No additional information.**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information**

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It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Do not allow product to reach sewage system or open water. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Absorb with inert material and place in chemical waste container for proper disposal in a disposable facility for incineration in a chemical incinerator. Remove all sources of ignition. Have fire extinguishing agent available in case of fire.

**SECTION 14: Transport information****US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

1170

**Limited Quantity Exception:**

None

**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Ethanol Solutions.**Hazard Class:** 3**Packing Group:** II.**Marine Pollutant (if applicable):** No**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Ethanol Solutions.**Hazard Class:** 3**Packing Group:** II.**Marine Pollutant (if applicable):** No**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute, Fire, Chronic

**SARA Section 313 (Specific toxic chemical listings):**

77-09-8 Phenolphthalein.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

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All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

**Proposition 65 (California):****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.

**Canada****Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

**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 applicable to this material. 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.

**NFPA:** 2-3-0**HMIS:** 2-3-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
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 GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
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