according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

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

Product name:

Phenolphthalein Indicator Reagent

Manufacturer/Supplier Article number: AR-1010-500

Recommended uses of the product and restrictions on use: Laboratory chemicals **Manufacturer Details**:

Aqua Analytics 245 Matheson Blvd East, Units 1 & 2 Mississauga, Ontario Canada L4Z 3C9 (888) 712-4000

Emergency telephone number:

Emergency Phone No. (613) 996-6666

SECTION 2: Hazards identification

Classification of the substance or mixture:



Acute toxicity (inhalation), category 4 Flammable liquids, category 3

Eye irritation, category 2A Specific target organ toxicity - single exposure, category 1 Specific target organ toxicity - single exposure, category 3, central nervous system Acute toxicity (oral), category 4 Acute toxicity (dermal), category 4

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapor. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes serious eye irritation. Causes damage to organs. May cause drowsiness or dizziness.

Precautionary statements:

Wear protective gloves/protective clothing/eye protection/face protection. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wash skin thoroughly after handling.

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/light/equipment.

If exposed: Call a poison center or doctor/physician.

Wash contaminated clothing before reuse.

If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use agents recommended in section 5 for extinction.

If swallowed: Call a poison center or doctor/physician if you feel unwell.

Rinse mouth.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Specific treatment (see supplemental first aid instructions on this label).

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.

Store in a well ventilated place. Keep container tightly closed.

Store in a well ventilated place. Keep cool.

Store locked up.

Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:				
CAS 67-56-1	Methanol	12.5 %		
CAS 64-17-5	Ethanol	12.5 %		
CAS 67-63-0	Isopropanol	25 %		
CAS 77-09-8	Phenolphthalein	0.5 %		
CAS 7732-18-5	Water (DI)	50 %		
Percentages are by weight				

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.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

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 hrs.; therefore, medical observation for at least 48 hrs. after the accident. Have exposed individual drink sips of water or milk.

Most important symptoms and effects, both acute and delayed:

Headache. Acidosis. Disorientation. Unconsciousness. Coughing. Breathing difficulty. Dizziness. Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Slight irritant effect on skin and mucous membranes. Irritant to eyes. Blindness.

Indication of any immediate medical attention and special treatment needed:

Contains methanol. Consult literature for specific antidotes. Medical supervision for at least 48 hrs. Monitor circulation, possible shock treatment. If necessary oxygen respiration treatment. Note to physician: Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

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:

Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

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, observing precautions in Section 8. 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.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

See Section 13 for disposal information.

SECTION 7: Handling and storage

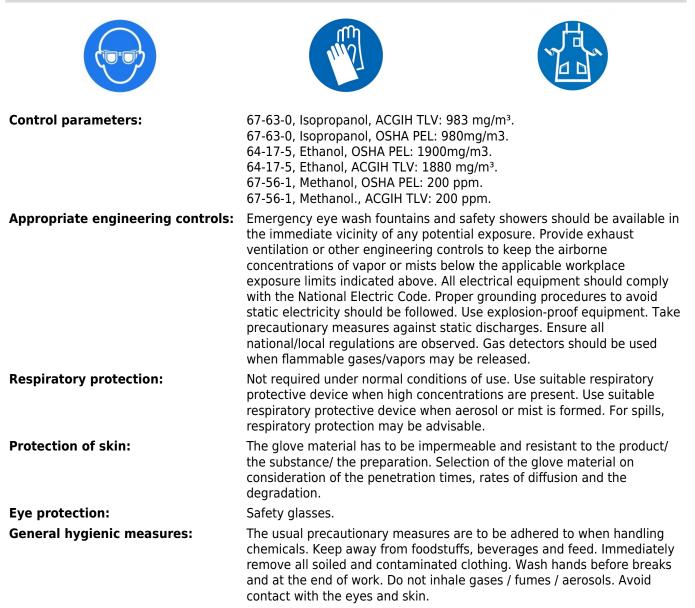
Precautions for safe handling:

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



according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	Explosion limit lower: Explosion limit upper:	Product does not present Explosion hazard Not determined
Odor:	Mild alcohol	Vapor pressure at 20°C:	33mmHg @ 20C
Odor threshold:	Not determined	Vapor density:	2.1
pH-value:	8.0 - 8.2	Relative density:	Not determined
Melting/Freezing point:	- 88C	Solubilities:	Soluble in water
Boiling point/Boiling range:	$\Delta n n r \alpha \gamma \kappa \gamma^{-1}$	Partition coefficient (n- octanol/water):	Not determined
Flash point (closed cup):	INIAT AATArminaa	Auto/Self-ignition temperature:	Product is not self-igniting
Evaporation rate:	2.88	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	slightly heavier than water		

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:

ATE: 50ppm.

Oral:

LD50 rat: 5840 mg/kg (Isopropanol).

Inhalation:

LC50 rat 83.2 mg/L (Methanol).

Chronic Toxicity:

Oral:

No testing available.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

Dermal:

No testing available.

Inhalation:

No testing available.

Skin corrosion/irritation:

No testing available.

Serious eye damage/irritation:

No testing available.

Respiratory or skin sensitization:

Not classified

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure:

Not classified

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Toxicity to fish , Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 31 mg/l - 96 h.

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.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

Limited Quantity Exception:

UN1993

9 CFR 173.150 - Exceptions for Class 3 (flammable and combustible liquids).

Bulk: RQ (if applicable): None Proper shipping Name: Flammable Liquids, N.O.S. (Methanol, Ethanol, Isopropanol), 3. Hazard Class: 3 Packing Group: II. Marine Pollutant (if applicable): No additional information. Comments: None Non Bulk: RQ (if applicable): None Proper shipping Name: Flammable Liquids, N.O.S. (Methanol, Ethanol, Isopropanol), 3. Hazard Class: 3 Packing Group: II. Marine Pollutant (if applicable): No additional information. Comments: None





SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute,Chronic,Fire

SARA Section 313 (Specific toxic chemical listings):

67-56-1 Methanol.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

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:

77-09-8 Phenolphthalein.

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:

64-17-5 Ethanol.

67-56-1 Methanol.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 09.16.2014

Phenolphthalein Indicator Reagent

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.of this material.

NFPA: 1-2-0

HMIS: 1-2-0

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. Lig. 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)