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**NOTE:** CHEMTREC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

**Material Safety Data Sheet**

**Phenolphthalein 1%**

**PHENOLPHTHALEIN SOLUTION, ALCOHOLIC**

MSDS Number: P204 --- Effective Date: 01/01/04

**1. Product Identification**

**Synonyms:** Phenolphthalein indicator solutions

**CAS No.:** Not Applicable

**Molecular Weight:** Not Applicable

**Chemical Formula:** Not Applicable

**Vinquiry, Inc. Product Codes:** 10-204-0000, 10-204-0060, 10-204-0118, 10-204-0237, 10-204-0473

**2. Composition/Information on Ingredients**

Ingredient	CAS#	Percent	Hazardous
Ethyl alcohol	64-17-5	44-95	Yes
Phenolphthalein	77-09-8	0.5-1	Yes
Water	7732-18-5	55-5	No

**Hazard Symbols:** None listed.

**Risk Phrases:** None listed.

**3. Hazards Identification**

## EMERGENCY OVERVIEW

Appearance: colorless. **Warning!** Keep container closed. Use only with adequate ventilation. May cause central nervous system effects. Flammable liquid and vapor.

**Target Organs:** None known.

**VINQUIRY INC SAFETY DATA** Ratings (Provided here for your convenience)

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Health Rating: 1 – Slight

Flammability Rating: 3 – Severe

Reactivity Rating: 1 – Slight

Contact Rating: 1 – Slight

Lab Protective Equip: GLOVES AND GOGGLES

Storage Color Code:

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### Potential Health Effects

**Eye:** Eye contact may result in corneal lesions, vision loss or impairment, pain or blindness. 5 ppm and 40mg reported to cause moderate irritation.

**Skin:** Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.

**Ingestion:** Phenolphthalein may cause collapse, hypotension, purging, vomiting, diarrhea, pallor, rapid heart rate, coma, death. Denaturants used may contribute to toxic effects including visual distress, nausea, vomiting, headache.

**Inhalation:** May cause liver and kidney damage. Inhalation or ingestion of ethanol may result in inebriation, depression of nervous system, convulsions, coma and death from respiratory or cardiovascular failure.

**Chronic:** Denatured ethanol is associated with respiratory irritation, central nervous system depression, visual impairment, dermatitis, conjunctivitis, sensory and motor impairment.

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## 4. First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:** Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

**Ingestion:** Give conscious victim 2-4 cupfuls of milk or water. Get medical aid at once. Induce vomiting (touch finger to back of throat) keeping head lower than hips (prevent aspiration into lungs). Medical personnel may administer oxygen, maintain airway and blood pressure; gastric lavage may be performed.

**Inhalation:** Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

**Notes to Physician:** Treat symptomatically and supportively.

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## 5. Fire Fighting Measures

**General Information:** Vapors may form an explosive mixture with air. Vapors heavier than air, may travel considerable distance and flash back from source of ignition. Flammability class (OSHA): II Move container if possible, avoid breathing vapors or dust. Flammable liquid is poisonous - wear respiratory gear. Use flooding quantities of water as fog (streams may spread fire), cool all containers.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

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## 6. Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Shut off ignition source, avoid vapors. Isolate, ventilate spill area. Keep out of sewers/drains. Label reclaimed spill material as flammable.

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## 7. Handling and Storage

**Handling:** Wash thoroughly after handling. Ground and bond containers when transferring material. Avoid breathing dust, vapor, mist, or gas.

**Storage:** Flammables-area. Store capped at room temperature. Protect from heat and incompatibles. Do not store in unmarked containers.

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## 8. Exposure Controls/Personal Protection

**Engineering Controls:** Ventilation equipment must be explosion-proof. Provide local exhaust or general dilution ventilation.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethyl alcohol	1000 ppm	1000 ppm TWA; 1900 mg/m <sup>3</sup> TWA 3300 ppm IDLH (10 percent lower explosive limit)	1000 ppm TWA; 1900 mg/m <sup>3</sup> TWA
Phenolphthalein	none listed	none listed	none listed
Water	none listed	none listed	none listed

**OSHA Vacated PELs:** Ethyl alcohol: 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA Phenolphthalein: No OSHA Vacated PELs are listed for this chemical. Water: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

**Skin:** Wear protective gloves (butyl, neoprene, nitrile).

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Firefighting-- any self-contained breathing apparatus with full facepiece operated in pressure-demand mode. Use supplied air (SA) respirators or self-contained breathing apparatus (SCBA) at 2000ppm; SA or SCBA with Facepiece at 10,000ppm; above 10,000ppm use type C SAF in positive pressure/continuous flow mode; pos.press. SCBA for escape.

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## 9. Physical and Chemical Properties

**Physical State:** Clear liquid

**Appearance:** colorless

**Odor:** pungent alcohol odor

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** > air

**Evaporation Rate:**>1 (ether=1)

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:**Not available.

**Decomposition Temperature:**Not available.

**Autoignition Temperature:** Not applicable.

**Flash Point:** Not applicable.

**NFPA Rating:** Not published.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:**Not available.

**Molecular Formula:**Not available.

**Molecular Weight:**Not available.

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## 10. Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures up to boiling point.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other Materials:** Alkaloids, alkali metals, nitric acid, acetyl chloride, acetyl bromide, bromine pentafluoride, chromic anhydride, chromyl chloride, permanganic acid, platinum, potassium dioxide, potassium t-butoxide, hydrogen peroxide/sulfuric acid mixes, aluminum sesquibromide ethylate, calcium hypochlorite, iodine-mercuric oxide, manganese perchlorate mixtures, perchloric acid, potassium superoxide, sodium hydrazide, ammonium hydroxide-silver oxide mix., hydrogen peroxides, iodine-phosphorus, silver-nitric acid, silver nitrate.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, formaldehyde.

**Hazardous Polymerization:** Has not been reported

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## 11. Toxicological Information

**RTECS#:**

**CAS# 64-17-5** unlisted.

**CAS# 77-09-8** unlisted.

**CAS# 7732-18-5** unlisted.

**LD50/LC50:**

**CAS# 64-17-5:**

Inhalation, mouse: LC50 =39 gm/m<sup>3</sup>/4H;

Inhalation, rat: LC50 =20000 ppm/10H;

Oral, mouse: LD50 = 3450 mg/kg;  
Oral, rabbit: LD50 = 6300 mg/kg;  
Oral, rat: LD50 = 7060 mg/kg;<BR.

CAS# 77-09-8:<BR.

CAS# 7732-18-5:  
Oral, rat: LD50 = >90 mL/kg;<BR.

**Carcinogenicity:**

CAS# 64-17-5:

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen CAS# 77-09-8:

**California:** carcinogen; initial date 5/15/98

**NTP:** Suspect carcinogen

**OSHA:** Possible Select carcinogen

**IARC:** Group 2B carcinogen CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** ethanol-- eye, skin, and mucous membrane irritant; central nervous system depressant. Phenolphthalein is an eye, skin, mucous membrane and respiratory tract irritant; considered dangerous if applied directly to skin.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** No data available.

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## 12. Ecological Information

No information available.

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## 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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## 14. Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	ETHANOL SOLUTION				No information available.
<b>Hazard Class:</b>	3				
<b>UN Number:</b>	UN1170				
<b>Packing Group:</b>	PG III				

## 15. Regulatory Information

### US FEDERAL

#### TSCA

CAS# 64-17-5 is listed on the TSCA inventory.

CAS# 77-09-8 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

### SARA

#### Section 302 (RQ)

None of the chemicals in this material have an RQ.

#### Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 64-17-5: acute, chronic, flammable. CAS # 77-09-8: acute.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

### STATE

CAS# 64-17-5 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 77-09-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

WARNING: This product contains Phenolphthalein, a chemical known to the state of California to cause cancer. WARNING: This product contains Ethyl alcohol, a chemical known to the state of California to cause birth defects or other reproductive harm. California No Significant Risk Level: None of the chemicals in this

product are listed. **European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

Not available.

**Risk Phrases:**

**Safety Phrases:**

**WGK (Water Danger/Protection)**

CAS# 64-17-5: 0

CAS# 77-09-8: 1

CAS# 7732-18-5: No information available.

**Canada**

CAS# 64-17-5 is listed on Canada's DSL List. CAS# 64-17-5 is listed on Canada's DSL List. CAS# 77-09-8 is listed on Canada's DSL List. CAS# 77-09-8 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List. CAS# 7732-18-5 is listed on Canada's DSL List.

WHMIS: Not available.

CAS# 64-17-5 is listed on Canada's Ingredient Disclosure List.

CAS# 77-09-8 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

**Exposure Limits**

CAS# 64-17-5: OEL-AUSTRALIA:TWA 1000 ppm (1900 mg/m3) OEL-BELGIUM:TWA 1000 ppm (1880 mg/m3) OEL-CZECHOSLOVAKIA:TWA 1000 mg/m3;STEL 5000 mg/m3 OEL-DENMARK:TWA 1000 ppm (1900 mg/m3) OEL-FINLAND:TWA 1000 ppm (1900 mg/m3);STEL 1250 ppm (2400 mg/m3) OEL-FRANCE:TWA 1000 ppm (1900 mg/m3);STEL 5000 pp OEL-GERMANY:TWA 1000 ppm (1900 mg/m3) OEL-HUNGARY:TWA 1000 mg/m3;STEL 3000 mg/m3 OEL-THE NETHERLANDS:TWA 1000 ppm (1900 mg/m3) OEL-THE PHILIPPINES:TWA 1000 ppm (1900 mg/m3) OEL-POLAND :TWA 1000 mg/m3 OEL-RUSSIA:STEL 1000 mg/m3 OEL-SWEDEN:TWA 1000 ppm (1900 mg/m3) OEL-SWITZERLAND:TWA 1000 ppm (1900 mg/m3) OEL-THAILAND:TWA 1000 ppm (1900 mg/m3) OEL-TURKEY:TWA 1000 ppm (1900 mg/m3) OEL-UNITED KINGDOM:TWA 1000 ppm (1900 mg/m3) JAN9 OEL IN BULGARIA, COLOMBIA , JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

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## 16. Other Information

None.

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## Disclaimer

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