

## SAFETY DATA SHEET

Preparation Date: 5/24/2018

Revision Date: 5/24/2018

Revision Number: G1

### 1. IDENTIFICATION

**Product identifier**

**Product code:** P-150  
**Product Name:** PHENOLPHTHALEIN, 0.5 PERCENT (W/V) INDICATOR SOLUTION IN 50 PERCENT ALCOHOL, APHA

**Other means of identification**

**Synonyms:** No information available  
**CAS #:** Mixture  
**RTECS #** Not available  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Serious eye damage/eye irritation	Category 2
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 3

**Label elements**

**Danger**

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**Hazard statements**

Causes serious eye irritation  
 Suspected of causing genetic defects  
 Suspected of causing cancer  
 May damage fertility or the unborn child  
 May cause respiratory irritation. May cause drowsiness or dizziness  
 Causes damage to organs through prolonged or repeated exposure  
 Flammable liquid and vapor

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Causes mild skin irritation  
 Can burn with an invisible flame  
 May cause blindness if swallowed

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wash face, hands and any exposed skin thoroughly after handling  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 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/lighting/.../equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

*Call a POISON CENTER or doctor/physician if you feel unwell*  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.  
 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.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Components	CAS-No.	Weight %
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Ethyl alcohol	64-17-5	44.9
Isopropyl Alcohol	67-63-0	2.49
Methyl Alcohol	67-56-1	2.36
Phenolphthalein, powder	77-09-8	0.5

## 4. FIRST AID MEASURES

### First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
- Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. Obtain medical attention.

### Most important symptoms and effects, both acute and delayed

- Symptoms**
- Causes serious eye irritation
  - Irritating to skin
  - Contains Methyl Alcohol. Methanol can be absorbed through the skin producing systemic effects that include visual disturbances. Absorption through the skin may cause metabolic acidosis
  - Contains Methyl alcohol. Exposure to high concentrations of Methyl alcohol vapor can cause blurred vision, impaired vision or blindness
  - Contains Methyl alcohol which can cause metabolic acidosis when ingested or inhaled
  - Ingestion may cause significant visual disturbances including blindness since it contains Methyl alcohol
  - Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea
  - Abdominal pain
  - Central nervous system effects
  - Inhalation of vapors may cause dizziness or suffocation
  - May cause drowsiness or dizziness
  - May affect the liver
  - It may affect the kidneys
  - May affect respiration
  - May cause cardiovascular effects

### Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** This product contains Methyl Alcohol.  
For Methyl Alcohol Ingestion:
1. Support vital functions, correct for dehydration and shock, and manage fluid balance.
  2. The currently recommended medical management of Methanol poisoning includes the following methods:
    - a. Emptying the stomach by gastric lavage. It is useful if initiated within < 1 of ingestion.
    - b. Correct metabolic acidosis with intravenous administration of sodium bicarbonate, adjusting the administration rate according to repeated and frequent measurement of acid/base status.
    - c. Administer ethanol (orally or by IV (intravenously)) or Fomepizole (4-methylpyrazole or Antizol)) therapy by IV (intravenously) as an antidote to inhibit the formation of toxic metabolites. Adjunct therapy with Leucorvin followed by Folate can also be initialized.

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Please note that if Ethanol therapy is used, monitor blood glucose, especially in children. Ethanol can cause hypoglycemia.

d. When patients are diagnosed and treated early in the course with the above methods, hemodialysis may be avoided if fomepizole or ethanol therapy is effective, and the metabolic acidosis is corrected, and no renal failure is present. However, once severe acidosis and renal failure occurred, hemodialysis is necessary. Hemodialysis is effective in removing Methyl alcohol and toxic metabolites, and correcting metabolic acidosis.

#### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## **5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media:**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray. Alcohol-resistant foam.

#### **Unsuitable Extinguishing Media:**

Do not use a solid (straight) water stream as it may scatter and spread fire.

### **Specific hazards arising from the chemical**

#### **Hazardous Combustion Products:**

Carbon Monoxide, Carbon Dioxide.

#### **Specific hazards:**

Flammable. Material can burn with invisible flame. May be ignited by heat, sparks or flames. Vapor may travel considerable distance to source of ignition and flash back. Vapours may form explosive mixtures with air. Container explosion may occur under fire conditions or when heated. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks).

### **Special Protective Actions for Firefighters**

#### **Specific Methods:**

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

#### **Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Keep away from heat and sources of ignition. Store in a segregated and approved area.

#### **Incompatible Materials:**

Oxidizing agents  
Acids  
Alkali Metals  
Bases  
Acid anhydrides  
Acid chlorides  
isocyanates  
Halogens  
Hydrazine

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Ethyl alcohol	64-17-5	1000 ppm TWA 1900 mg/m <sup>3</sup> TWA	1000 ppm TWA 1900 mg/m <sup>3</sup> TWA	1000 ppm STEL	None
Isopropyl Alcohol	67-63-0	400 ppm TWA 980 mg/m <sup>3</sup> TWA	400 ppm TWA 980 mg/m <sup>3</sup> TWA 500 ppm STEL 1225 mg/m <sup>3</sup> STEL	400 ppm STEL 200 ppm TWA	None
Methyl Alcohol	67-56-1	200 ppm TWA 260 mg/m <sup>3</sup> TWA	200 ppm TWA 260 mg/m <sup>3</sup> TWA 250 ppm STEL 325 mg/m <sup>3</sup> STEL	250 ppm STEL 200 ppm TWA	Not determined
Phenolphthalein, powder	77-09-8	None	None	None	None

##### Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Ethyl alcohol	64-17-5	1000 ppm TWA 1880 mg/m <sup>3</sup> TWA	1000 ppm STEL	1000 ppm STEL	None
Isopropyl Alcohol	67-63-0	200 ppm TWA 492 mg/m <sup>3</sup> TWA 400 ppm STEL 984 mg/m <sup>3</sup> STEL	200 ppm TWA 400 ppm STEL	400 ppm STEL	None
Methyl Alcohol	67-56-1	200 ppm TWA 262 mg/m <sup>3</sup> TWA 250 ppm STEL 328 mg/m <sup>3</sup> STEL	200 ppm TWA 250 ppm STEL	200 ppm TWA 250 ppm STEL	200 ppm TWAEV 262 mg/m <sup>3</sup> TWAEV 250 ppm STEV 328 mg/m <sup>3</sup> STEV
Phenolphthalein, powder	77-09-8	None	None	None	None

##### Australia and Mexico

Components	CAS-No.	Australia	Mexico
Ethyl alcohol	64-17-5	1000 ppm TWA 1880 mg/m <sup>3</sup> TWA	1000 ppm TWA 1900 mg/m <sup>3</sup> TWA
Isopropyl Alcohol	67-63-0	500 ppm STEL 1230 mg/m <sup>3</sup> STEL 400 ppm TWA 983 mg/m <sup>3</sup> TWA	400 ppm TWA 980 mg/m <sup>3</sup> TWA 500 ppm STEL 1225 mg/m <sup>3</sup> STEL
Methyl Alcohol	67-56-1	250 ppm STEL 328 mg/m <sup>3</sup> STEL 200 ppm TWA 262 mg/m <sup>3</sup> STEL	200 ppm TWA 260 mg/m <sup>3</sup> TWA 250 ppm STEL 310 mg/m <sup>3</sup> STEL
Phenolphthalein, powder	77-09-8	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

## Individual protection measures, such as personal protective equipment

### Personal Protective Equipment

<b>Eye protection:</b>	Goggles
<b>Skin and body protection:</b>	Long sleeved clothing Chemical resistant apron Gloves
<b>Respiratory protection:</b>	Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Appearance:</b> No information available.	<b>Color:</b> Colorless.
<b>Odor:</b> Alcoholic.	<b>Taste</b> No information available.	<b>Formula:</b> No information available
<b>Molecular/Formula weight:</b> No information available	<b>Flammability:</b> Flammable	<b>Flashpoint (°C/°F):</b> No information available.
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> 363-426 °C/685.4-798.8 °F (for ethyl alcohol)	<b>Lower Explosion Limit (%):</b> 3.3% (for ethyl alcohol)
<b>Upper Explosion Limit (%):</b> 19% (for ethyl alcohol)	<b>Melting point/range(°C/°F):</b> No information available	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> approximately 0.88-0.9	<b>pH:</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> 394 (calculated)
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Soluble in Water	

## 10. STABILITY AND REACTIVITY

### Reactivity

For Ethyl alcohol:

Can react vigorously/explosively with oxidizers. Ethanol can react vigorously/explosively with the following: ammonium hydroxide & silver oxide, chlorine or chlorine oxides, perchlorates (barium perchlorate, chloryl perchlorate, magnesium perchlorate (forms ethyl perchlorate), nitrosyl perchlorate, potassium perchlorate, silver perchlorate, uranyl perchlorate), acetic anhydride, acetyl bromide (evolves hydrogen bromide), acetyl chloride, aluminum sesquibromide ethylate, bromine pentafluoride, calcium hypochlorite, chromic anhydride, chromium trioxide, chromyl chloride, cyanuric acid + water, dichloromethane + sulfuric acid +

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nitrate (or) nitrite, manganese perchlorate + 2,2-dimethoxy propane, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, manganese heptoxide, iodine + methanol + mercuric oxide, iodine + Phosphorus (forms ethane iodide), mercuric nitrate, nitric acid, perchloric acid, permanganic acid, peroxodisulfuric acid, platinum black, potassium dioxide, potassium permanganate, potassium superoxide, potassium tert-butoxide, ruthenium(VIII) oxide, silver +nitric acid (forms silver fulminate), silver nitrate (forms ethyl nitrate), silver peroxide, sodium hydrazide, hydrogen peroxide + sulfuric acid, sulfuric acid + permanganates, uranium hexafluoride, sulfuric acid + sodium dichromate, tetrachlorosilane + water, silver & nitric acid, tetraphosphorus hexoxide

When Ethanol comes in contact with Sodium, it liberates flammable hydrogen gas

Ethanol ignites and then explodes on contact with the following compounds: acetic anhydride + sodium hydrosulfate, disulfuric acid + nitric acid, phosphorus (III) oxide, platinum, potassium tert-butoxide + acids

Ethyl Alcohol reacts vigorously with acetyl chloride.

It reacts with alkali metals to liberate flammable hydrogen gas

### **Chemical stability**

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Oxidizing agents  
Acids  
Alkali Metals  
Bases  
Acid anhydrides  
Acid chlorides  
isocyanates  
Halogens  
Hydrazine  
Metals

**Hazardous decomposition products:** Carbon monoxide.

### **Other Information**

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## **11. TOXICOLOGICAL INFORMATION**

### **Information on likely routes of exposure**

**Principal Routes of Exposure:**

Eyes. Ingestion. Inhalation. Skin.

### **Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

#### **Component Information**

Ethyl alcohol
CAS-No. 64-17-5

**LD50/oral/rat = 7060 mg/kg Oral LD50 Rat**

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**LD50/oral/mouse** = 3450 mg/kg  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = 124.7 mg/L Inhalation LC50 Rat 4 h  
**LC50/inhalation/mouse** = 39000 mg/m<sup>3</sup> 4 h  
**Other LD50 or LC50information** = >60000 ppm Inhalation LC50 Mouse 1 h  
 5900 mg/m<sup>3</sup> Inhalation LC50 Rat 6 h  
 20000 ppm Inhalation LC50 Rat 10 h  
 5560 mg/kg Oral LD50 Guinea Pig  
 6300 mg/kg Oral LD50 Rabbit

Isopropyl Alcohol	
CAS-No.	67-63-0

**LD50/oral/rat** = 1870 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = 3600 mg/kg (RTECS)  
**LD50/dermal/rabbit** = 12800 mg/kg(RTECS)  
 4059 mg/kg(LOLI)  
 12870 mg/kg(EU Chemicals Bureau IUCLID dataset)  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = 72.6 mg/l 4 h  
 16000 ppm Inhalation LC50 Rat 8 h  
**LC50/inhalation/mouse** = 27.2 mg/l 4 h  
**Other LD50 or LC50information** = LD50 oral 6410 mg/kg [Rabbit]

Methyl Alcohol	
CAS-No.	67-56-1

**LD50/oral/rat** = 5628 mg/kg (EU Chemicals Bureau IUCLID datasheet)  
 5600 mg/kg (RTECS)  
 6200 mg/kg Oral LD50 Rat (LOLI; EU Chemicals Bureau IUCLID dataset)  
**LD50/oral/mouse** = 5800 mg/kg  
**LD50/dermal/rabbit** = 15800 mg/kg; 15840 mg/kg Dermal LD50 Rabbit  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = 83.2 mg/L Inhalation LC50 Rat 4 h  
 64000 ppm 4 h; 22500 ppm Inhalation LC50 8h  
**LC50/inhalation/mouse** = 41000 ppm 6 h  
**Other LD50 or LC50information** = 14200 mg/kg Oral LD50 Rabbit  
 7500 mg/kg Oral LD50 Dog  
 >5000 mg/kg Oral LD50 Pig  
 7000 mg/kg Oral LD50 Monkey  
 22500 ppm Inhalation LC50 Rat 8 hr.

Phenolphthalein, powder	
CAS-No.	77-09-8

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50information** = No information available

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**LD50/oral/rat** =  
**VALUE- Acute Tox Oral** = No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

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**LD50/dermal/rabbit**

**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**

**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**

**VALUE-Vapor** = No information available

**VALUE-Gas** = No information available

**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**

**VALUE-Vapor** = No information available

**VALUE - Gas** = No information available

**VALUE - Dust/Mist** = No information available

**Symptoms**

**Skin Contact:** Mildly to moderately irritating to the skin. Contains Methyl Alcohol. Methanol can be absorbed through the skin, producing systemic effects that include visual disturbances. Absorption through the skin may cause metabolic acidosis.

**Eye Contact:** Causes serious eye irritation. Eye contact may result in redness or pain.

**Inhalation** Irritating to respiratory system. Symptoms may include coughing and shortness of breath. May cause nausea and headache. It may affect behavior/central nervous system (ataxia, general anesthetic, drowsiness). May affect respiration (respiratory depression). Inhalation of vapors may cause drowsiness and dizziness. Inhalation of high concentrations of vapor may cause anesthetic effects. May affect the brain. Contains Methyl alcohol. Exposure to high concentrations of Methyl alcohol vapor or mist can cause blurred vision, impaired vision or blindness, and metabolic acidosis.

**Ingestion** May cause digestive (gastrointestinal) tract irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause gastritis. May cause loss of appetite. May cause flushed skin. May affect the cardiovascular system (change in heart rate). May affect the cardiovascular system (hypotension or hypertension, tachycardia, dysrhythmias). It may affect behavior/central nervous system (excitation, mild euphoria, excessive talking, fatigue, headache, dizziness, drowsiness, staggering gait, ataxia, hallucinations, slurred speech, amnesia, confusion, release of inhibitions, aggressive behavior, convulsions, coma). May affect behavior/central nervous system (tremors, muscle twitching). It may affect the brain. May affect respiration (dyspnea, respiratory depression). May affect liver. May affect the blood. May affect urinary system (kidneys). Contains Methyl alcohol which can cause metabolic acidosis. Contains Methyl alcohol which can affect vision and cause blindness if swallowed.

**Aspiration hazard** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Prolonged or repeated skin contact may cause dermatitis, and dryness and cracking of the skin. Prolonged or repeated ingestion may affect behavior/central nervous system. Prolonged or repeated ingestion may affect metabolism (cause anorexia, weight loss). Prolonged or repeated ingestion may affect the liver (fatty liver degeneration, cirrhosis of the liver. Prolonged or repeated ingestion may

affect the cardiovascular system. Prolonged or repeated inhalation may affect the liver.

**Sensitization:** No information available.

**Mutagenic Effects:** Suspected of causing genetic defects  
 Contains Phenolphthalein. Therefore, suspected of causing genetic defects  
 For Phenolphthalein:  
 Mutagenic effects on mammalian germ cells  
 Cytogenic Analysis: Hamster ovary (RTECS)  
 Cytogenic Analysis: Human embryo (RTECS)  
 Micronucleus Test: Hamster ovary (RTECS)

**Carcinogenic effects:** Suspected of causing cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Ethyl alcohol	64-17-5	Group 1 - Monograph 100E [2012] in alcoholic beverages Monograph 96 [2010] in alcoholic beverages	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Not listed	Present	Not listed	Not listed
Isopropyl Alcohol	67-63-0	Group 3 - Not Classifiable - Monograph 71 [1999] Supplement 7 [1987] Monograph 15 [1977]	A4 Not Classifiable as a Human Carcinogen	Not listed	Not listed	Not listed	Not listed
Methyl Alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Phenolphthalein, powder	77-09-8	Group 2B - Monograph 76 [2000]	Not listed	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** May damage fertility or the unborn child

**Reproductive Effects:** Causes adverse reproductive effects  
**Developmental Effects:** May cause adverse developmental effects  
 May cause harm to the unborn child  
 Possible risk of harm to the unborn child  
**Teratogenic Effects:** May cause birth defects (teratogenic effects)

**Specific Target Organ Toxicity**

**STOT - single exposure** Respiratory system. central nervous system.  
**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

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**Target Organs:** Skin. Liver. Kidneys. Central nervous system. Nervous system. Optic nerve. Eyes/vision. Heart.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Ecotoxicity effects:** Aquatic environment.

*Ethyl alcohol - 64-17-5*

**Freshwater Fish Species Data:** 12.0 - 16.0 mL/L LC50 *Oncorhynchus mykiss* 96 h static 1 100 mg/L LC50 *Pimephales promelas* 96 h static 1 13400 - 15100 mg/L LC50 *Pimephales promelas* 96 h flow-through 1

**Water Flea Data:** 9268 - 14221 mg/L LC50 *Daphnia magna* 48 h 2 mg/L EC50 *Daphnia magna* 48 h 10800 mg/L EC50 *Daphnia magna* 24 h

*Isopropyl Alcohol - 67-63-0*

**Freshwater Algae Data:** 1000 mg/L EC50 *Desmodesmus subspicatus* 96 h 1000 mg/L EC50 *Desmodesmus subspicatus* 72 h

**Freshwater Fish Species Data:** 9640 mg/L LC50 *Pimephales promelas* 96 h flow-through 1 11130 mg/L LC50 *Pimephales promelas* 96 h static 1 1400000 µg/L LC50 *Lepomis macrochirus* 96 h 1

**Water Flea Data:** 13299 mg/L EC50 *Daphnia magna* 48 h

*Methyl Alcohol - 67-56-1*

**Freshwater Fish Species Data:** 28200 mg/L LC50 *Pimephales promelas* 96 h flow-through 1 100 mg/L LC50 *Pimephales promelas* 96 h static 1 19500 - 20700 mg/L LC50 *Oncorhynchus mykiss* 96 h flow-through 1 18 - 20 mL/L LC50 *Oncorhynchus mykiss* 96 h static 1 13500 - 17600 mg/L LC50 *Lepomis macrochirus* 96 h flow-through 1

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

#### **Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

#### **Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethyl alcohol	64-17-5	None	None	None	None
Isopropyl Alcohol	67-63-0	None	None	None	None
Methyl Alcohol	67-56-1	None	None	None	U154 ignitable waste
Phenolphthalein, powder	77-09-8	None	None	None	None

## 14. TRANSPORT INFORMATION

DOT

**Product code:** P-150

**Product name:** PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
SOLUTION IN 50 PERCENT  
ALCOHOL, APHA

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**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol  
**Hazard Class:** 3  
**Subsidiary Class:** No information available  
**Packing group:** III  
**Emergency Response Guide Number:** 127  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions:** 24, B1, IB3, T2, TP1  
**Symbol(s):** No information available  
**Description:** UN1170, Ethanol, 3, III

**TDG (Canada)**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant:** No Information available  
**Description:** UN1170, Ethanol, 3, III

**ADR**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol solution  
**Hazard Class:** 3  
**Packing Group:** III  
**Subsidiary Risk:** No information available  
**Special Provisions:** 144, 601  
**Description:** UN1170, ETHANOL SOLUTION, 3, III

**IMO / IMDG**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Marine Pollutant:** No information available  
**EMS:** F-E  
**Special Provisions:** 144, 223  
**Description:** UN1170, Ethanol, 3, III

**RID**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol solution  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**Special Provisions:** 144, 601  
**Description:** UN1170, ETHANOL SOLUTION, 3, III

**ICAO**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** III

**Product code:** P-150

**Product name:** PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
SOLUTION IN 50 PERCENT  
ALCOHOL, APHA

**Description:** UN1170, Ethanol, 3, III  
**Special Provisions** A58, A180, A3

**IATA**

**UN-No:** UN1170  
**Proper Shipping Name:** Ethanol  
**Hazard Class:** 3  
**Subsidiary Risk:** No information available  
**Packing Group:** III  
**ERG Code:** 3L  
**Special Provisions** No information available  
**Description:** UN1170, Ethanol, 3, III

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Ethyl alcohol</i>	64-17-5	PresentACTIVE	Present KE-13217	Present	Present (2)-202	Present	Present	Present 200-578-6
<i>Isopropyl Alcohol</i>	67-63-0	PresentACTIVE	Present KE-29363	Present	Present (2)-207	Present	Present	Present 200-661-7
<i>Methyl Alcohol</i>	67-56-1	PresentACTIVE	Present KE-23193	Present	Present (2)-201	Present	Present	Present 200-659-6
<i>Phenolphthalein, powder</i>	77-09-8	Present	Present KE-03234	Present	Present (9)-1152	Present	Present	Present 201-004-7

**U.S. Regulations**

*Ethyl alcohol*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 0844  
**Pennsylvania RTK:** Present  
**Minnesota - Hazardous Substance List:** Present  
**California Directors List of Hazardous Substances:** Present  
**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 184.1293

**FDA - 21 CFR - Total Food Additives** 169.175, 169.176, 169.177, 169.181, 172.340, 172.560, 172.580, 175.105, 176.180, 176.200, 177.1200, 177.1650, 178.1010, 184.1293, 73.30, 73.345, 73.615

*Isopropyl Alcohol*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1076  
**New Jersey (EHS) List:** 1076 500 lb TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List** Present  
**Minnesota - Hazardous Substance List:** Present  
**California Directors List of Hazardous Substances:** Present

**FDA - Direct Food Additives** 21 CFR 172.515, 21 CFR 173.240, 21 CFR 173.340

**FDA - 21 CFR - Total Food Additives** 172.385, 172.515, 172.560, 172.665, 172.695, 173.240, 173.340, 175.105, 176.180, 176.200, 176.210, 177.1200, 177.2800, 178.1010, 178.3910, 73.1, 73.1001, 73.30, 73.315, 73.345, 73.615

*Methyl Alcohol*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1222  
**New Jersey (EHS) List:** 1222 500 lb TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List** Present  
**Minnesota - Hazardous Substance List:** Present

**Product code:** P-150

**Product name:** PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
SOLUTION IN 50 PERCENT  
ALCOHOL, APHA

**New York Release Reporting - List of Hazardous Substances:**

5000 lb RQ

1 lb RQ

**Louisiana Reportable Quantity List for Pollutants:** 5000lbfinal RQ

2270kgfinal RQ

**California Directors List of Hazardous Substances:** Present

**FDA - Direct Food Additives** 21 CFR 173.250 (residues); 21 CFR 172.869 (residual)

**FDA - 21 CFR - Total Food Additives** 172.560, 172.859, 172.867, 173.250, 173.385, 175.105, 175.300, 176.180, 176.200, 176.210, 177.1200, 177.2420, 177.2460, 177.2800, 73.345, 73.615

*Phenolphthalein, powder*

**New Jersey RTK Hazardous Substance List:** SN 4110

**New Jersey (EHS) List:** SN 4110 500lbTPQ

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

**⚠️ WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

**⚠️ WARNING:** This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Ethyl alcohol	64-17-5	carcinogen (ethanol in alcoholic beverages)	developmental toxicity (Ethyl alcohol in alcoholic beverages)	Not Listed	Not Listed
Isopropyl Alcohol	67-63-0	Not Listed	Not Listed	Not Listed	Not Listed
Methyl Alcohol	67-56-1	Not Listed	developmental	Not Listed	Not Listed
Phenolphthalein, powder	77-09-8	carcinogen	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Ethyl alcohol</i>	64-17-5	None	None	None	None	None
<i>Isopropyl Alcohol</i>	67-63-0	None	None	None	None	1.0 % de minimis concentration
<i>Methyl Alcohol</i>	67-56-1	5000 lb final RQ 2270 kg final RQ	None	None	None	1.0 % de minimis concentration
<i>Phenolphthalein, powder</i>	77-09-8	None	None	None	None	0.1 % de minimis concentration

**U.S. TSCA**

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethyl alcohol	64-17-5	Not Applicable	Not Applicable
Isopropyl Alcohol	67-63-0	Not Applicable	Not Applicable
Methyl Alcohol	67-56-1	Not Applicable	Not Applicable
Phenolphthalein, powder	77-09-8	Not Applicable	Not Applicable

**Canada**

**WHIMIS 2015 - GHS Classifications**

**Product code:** P-150

**Product name:** PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
SOLUTION IN 50 PERCENT  
ALCOHOL, APHA

WHMIS 2015 Hazard Classification Information:

Component  
Ethyl alcohol  
64-17-5 ( 44.9 )

Isopropyl Alcohol  
67-63-0 ( 2.49 )

Methyl Alcohol  
67-56-1 ( 2.36 )

WHMIS 2015 Hazard Classification  
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Category 2B: H320 Causes eye irritation.  
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation. (70% aqueous solution)  
Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Oral - Category 3: H301 Toxic if swallowed.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.; Reproductive Toxicity - Category 1: H360 May damage fertility or the unborn child.; Specific target organ toxicity - Single exposure - Category 2: H371 May cause damage to organs.; Specific target organ toxicity - Single exposure - Category 3: H336 May cause drowsiness or dizziness.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**WHMIS 1988 Hazard Class**  
B2 Flammable liquid  
D2B Toxic materials

**Components**  
Ethyl alcohol  
Isopropyl Alcohol  
Methyl Alcohol

WHMIS 1988  
B2,D2B  
B2,D2B including 70%  
B2 D1B D2A D2B including 28%

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Ethyl alcohol	0.1 %
Isopropyl Alcohol	1 %
Methyl Alcohol	1 %

**Inventory**

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Ethyl alcohol	64-17-5	Present	Not Listed
Isopropyl Alcohol	67-63-0	Present	Not Listed
Methyl Alcohol	67-56-1	Present	Not Listed
Phenolphthalein, powder	77-09-8	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Ethyl alcohol	64-17-5	Not listed
Isopropyl Alcohol	67-63-0	Not listed
Methyl Alcohol	67-56-1	Not listed
Phenolphthalein, powder	77-09-8	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl alcohol	64-17-5	Not listed
Isopropyl Alcohol	67-63-0	Not listed
Methyl Alcohol	67-56-1	Not listed
Phenolphthalein, powder	77-09-8	Not listed

**EU Classification**

EU GHS - SV - CLP 1272/2008

Product code: P-150

Product name: PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
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Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Ethyl alcohol	64-17-5	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.603-002-00-5
Isopropyl Alcohol	67-63-0	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.; Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.603-117-00-0
Methyl Alcohol	67-56-1	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 3: H301 Toxic if swallowed. (Minimum classification); Acute toxicity - Dermal - Acute Tox. 3: H311 Toxic in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure)603-001-00-X Specific target organ toxicity - Single exposure - STOT SE 1: H370 Causes damage to organs. (C >= 10 %; No information to prove exclusion of certain routes of exposure); Specific target organ toxicity - Single exposure - STOT SE 2: H371 May cause damage to organs. (3 % <= C <10 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)603-001-00-X
Phenolphthalein, powder	77-09-8	Germ cell mutagenicity - Muta. 2: H341 Suspected of causing genetic defects.; Carcinogenicity - Carc. 1B: H350 May cause cancer. (C >= 1 %); Reproductive Toxicity - Repr. 2: H361f Suspected of damaging fertility. (Hazard statements H360 and H361 indicate a general concern for effects on both fertility and development: May damage/Suspected of damaging fertility or the unborn child; According to the criteria, the general hazard statement can be replaced by the hazard statement indicating the specific effect of concern in accordance with section 1.1.2.1.2; When the other differentiation is not mentioned, this is due to evidence proving no such effect, inconclusive data or no data and the obligations in Article 4(3) shall apply for that differentiation)604-076-00-1

Product code: P-150

Product name: PHENOLPHTHALEIN,  
0.5 PERCENT (W/V) INDICATOR  
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ALCOHOL, APHA

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		Carcinogenicity - Carc. 1B: H350 May cause cancer. (C >= 1%)604-076-00-1
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EU - CLP (1272/2008)

**R-phrase(s)**

**S -phrase(s)**

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Ethyl alcohol	64-17-5	F; R11	No information	S(2) S7 S16
Isopropyl Alcohol	67-63-0	F; R11 Xi; R36 R67	No information	S2 S7 S16 S24/25 S26
Methyl Alcohol	67-56-1	F; R11 T; R23/24/25-39/23/24/25	20%<=C: T; R:23/24/25 3%<=C<20%: Xn; R:20/21/22 10%<=C: T; R:39/23/24/25 3%<=C<10%: Xn; R:68/20/21/22	S1/2 S7 S16 S36/37 S45
Phenolphthalein, powder	77-09-8	Carc.Cat.2; R45 Repr.Cat.3; R62 Muta.Cat.3; R68	1%<=C Carc.Cat.2; R45	S53 S45

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

Flammable  
Xn - Harmful.  
Xi - Irritant.

**16. OTHER INFORMATION**

**Preparation Date:** 5/24/2018  
**Revision Date:** 5/24/2018  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no

**Product code:** P-150

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responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**