

Phenolphthalein Presumptive Blood Test Kit

Material Safety Data Sheets & Instructions
Part # 36-6134



MATERIAL SAFETY DATA SHEET

PP0158 MSDS No.: Revision Date: April 8, 2009

Approved by: James A. Bertsch

MSDS No.: PP0158

Chemical Product and Company Information Section 1 2% PHENOLPHTHALEIN IN 20% POTASSIUM HYDROXIDE SOLUTION Product

N/A Synonyms

CHEMTREC 34 Hour Emergency Phone Number (900) 494-0900

Rochester, NY 14692-9012 5851-359-2592

Catharines, Ontario L2S 3T5

115 Finro Lano San Luís Obispo, GA 92483-5010

97 Vasirkie Road

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300	revisou morares econ extendibilitati	nementalista en	090090
Section 2 Hazards Identification			
Emergency Overview	0 = Minimal	Health	3
DANGER! CORROSIVE!	1 = Slight	Fire	0
HARMFUL IF SWALLOWED. CAUSES BURNS. Avoid contact with skin, eyes and clothing. Do not inhale vapors or spray.	2 = Moderate 3 = Serious	Reactivity	1
Target organs: None known.	4 = Severe	Contact	3

HMIS 3

NEPA

0 = Minimal 1 = Slight

2 = Moderate 3 = Serious

4 = Severe

Chemical Name	CAS#	%	TLV Units (ACGIH 2001)
Potassium hydroxide	1310-58-3	20%	TWA: C 2 mg/m ³
Phenolphthalein	77-09-8	2%	None established.
Water	7732-18-5	78%	None established.

First Aid Measures Section 4

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Fire Fighting Measures Section 5

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume. Use water spray to keep fire-exposed containers cool. Contact with some metals can generate hydrogen gas. A severe eye hazard, solid or concentrated solution destroys tissue on contact.

Extinguishing Media: Use any media suitable for extinguishing supporting fire Flash Point: Not flammable

Autoignition temperature: N/A

Explosion Limits: Lower: N/A Upper: N/A

Section 6 Accidental Release Measures

Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

(2008 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2008), GUIDE # 154)

Section 7 Handling & Storage

CORROSIVE STORAGE CODE WHITE

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children. Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts or mist. Wash thoroughly after handling. Remove and wash clothing before reuse.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 Exposure Controls / Personal Protection

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in tume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Boiling point: ~100°C (212°F) (water) Physical state: Liquid. Appearance: Clear, colorless.

Odor: No odor. pH: N/A

Vapor pressure (mm Hg): 14 (water) Vapor Density (Air = 1): 0.7 (water) Evaporation rate (Butyl acetate = 1): < 1 Viscosity: N/A

Freezing / Melting point: ~0°C (32°F) (water) Decomposition temperature: N/A Solubility in water: Complete.

Specific gravity (H₂O = 1): ~1.1 Percent volatile (%): 78% Molecular formula: Mixture. Molecular weight: Mixture.

Stability & Reactivity Section 10

Hazardous polymerization: Will not occur. Chemical stability: Stable

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatibilities with other materials: Acids, aluminum, halogens, nitro compounds, organic materials, acid chlorides, acid anydrides, magnesium, copper, tin and zinc.

Hazardous decomposition products: Hydrogen gas in contact with metals.

Toxicological Information Section 11

Effects of overexposure: Harmful if swallowed, inhaled or absorbed through skin. Material is extremely destructive to tissues of the mucous membranes, upper respiratory tract, skin and eyes. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Exercise appropriate procedures to minimize potential hazards.

RTECS #: TT2100000 (as potassium hydroxide) ORAL-RAT LD50: 273 mg/kg (as potassium hydroxide)

Ecological Information Section 12

Data not vet available.

Disposal Considerations Section 13

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local. state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: UN1814

Shipping name: Potassium hydroxide, solution

Hazard class: 8

Packing group: II

Exceptions: Limited quantity equal to or less than 1 Lt.

Section 15

Regulatory Information

As potassium hydroxide: TSCA-listed, EINECS-listed (215-181-3), RCRA code D002, D003, DSL-listed.

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards.



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MATERIAL SAFETY DATA SHEET

EE0076

MSDS No.: Revision Date: September 25, 2008 Approved by: James A. Bertsch

Chemical Product and Company Information Section 1 ETHYLALCOHOL, DENATURED, 95% Product

N/A Synonyms

MSDS No.: EE0076

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

Hazards Identification Section 2 Emergency Overview

DANGER! FLAMMABLE!

VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. Keep away from heat, sparks, flame and all other ignition sources. Avoid breathing

Continue Composition / Information on Ingradients

vapor. Use with adequate ventilation. Do not get in eyes, on skin or on clothing. Target organs: Eves, central nervous system, liver, kidneys.

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0 = Minimal	Health	1
1 = Slight	Fire	3
2 = Moderate 3 = Serious	Reactivity	0
4 = Severe	Contact	2

HMIS *

NEPA

0 = Minimal

1 = Slight

4 n Severe

2 - Moderate 3 = Serious

Chemical Name	CAS#	%	TLV Units (ACGIH 2001)
Ethyl alcohol, denatured* Water	64-17-5 7732-18-5	95% 5%	TWA: 1000 ppm None established.
*Denaturants: Isopropyl alcohol Methyl alcohol	67-63-0 67-56-1		TWA: 400 ppm STEL: 500 ppm PEL-TWA: 200 ppm STEL: 250 pp

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Fire Fighting Measures

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Fires involving a small amount of combustibles may be smothered by dry chemical. Vapors formed from this product may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge or other ignition sources at location distant from handling source. CAUTION! Flame may not be visible in daylight.

Extinguishing Media: Carbon dioxide, dry chemical, water spray, alcohol foam.

Flash Point: 10°C (50°F) TCC

Autoignition temperature: 363°C (685°F) Explosion Limits: Lower: 3.3% Upper: 19.0%

sewers and ditches which lead to waterways.

Section 6 Accidental Release Measures

Use proper personal protective equipment as indicated in Section 8. Remove all sources of ignition. Provide adequate ventilation. Recover for use if not contaminated. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm

(2008 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2008), GUIDE PAGE NO. 127)

Section 7 Handling & Storage FLAMMABLE STORAGE CODE RED

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children. Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, spray or mist. Wash thoroughly after handling. Remove and wash clothing before reuse. Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition

Section 8 **Exposure Controls / Personal Protection**

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Physical & Chemical Properties Section 9

Physical state: Liquid. Appearance: Clear, colorless.

Chemical stability: Stable

Odor: Mild, characteristic odor. pH: N/A

Vapor pressure (mm Hg): 44.6 mm @ 20°C (68°F) Vapor Density (Air = 1): 1.59

sources.

Evaporation rate (Butyl acetate = 1): 4.1 Viscosity: N/A

Section 10 Stability & Reactivity

Hazardous polymerization: Will not occur.

Boiling point: 75-80°C (173-174°F)

Decomposition temperature: N/A

Solubility: Complete

Percent volatile (%): 100%

Molecular formula: Mixture.

Molecular weight: Mixture.

Freezing / Melting point: -114°C (-173°F)

Specific gravity (H2O = 1): 0.794 @ 60°F

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatibilities with other materials: Contact with acetyl chloride and a wide range of oxidizing agents may react violently. Vapors may form flammable mixtures with air.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological Information

Effects of overexposure: INGESTION: Can cause central nervous system depression, nausea, vomiting, diarrhea. INHALATION: May cause headache, drowsiness, loss of appetite, inability to concentrate and irritation of the throat. EYES: Liquid or vapor may cause irritation. SKIN: May cause irritation and defatting of skin on prolonged contact, OTHER: Individual responses to Methyl alcohol vary, ingestion of less than 30 ml has been fatal to humans. In general a few ounces may cause blindness and death, as little as 4 ml may be toxic if ingested.

ORL-RAT LD50: N/A IHL-RAT LC50: N/A SKN-BBT LD50: N/A

Section 12 **Ecological Information**

Data not vet available.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: UN1170 Shipping name: Ethanol

Hazard class: 3 Packing group: II

Exceptions: Ltd Qtv ≤ 1 Lt.

Regulatory Information Section 15

TSCA-listed, EINECS-listed (200-578-6), RCRA code D001

Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards.

or not before the



MATERIAL SAFETY DATA SHEET

MSDS No.: HH0180 Revision Date: April 1, 2008 Approved by: James A. Bertsch

MSDS No.: HH0180

Chemical Product and Company Information Section 1 Product **HYDROGEN PEROXIDE, 3%** Hydrogen peroxide aqueous solution, stabilized Synonyms

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

	Composition / Informat	
Section 2		

Chemical Name	CAS#	%	TLV Units (ACGIH 2001)
Hydrogen peroxide Water Acetanilide	7722-84-1 7732-18-5 103-84-4	3% 97% 0.05%	TWA: 1 ppm None established. None established.
			# 000 none 1,000 a. 100 p.

Section 3 Hazards Identification	Hazards Identification
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Emergency Overview

CAUTION! IRRITANT, MAY CAUSE IRRITATION TO SKIN AND EYES ON CONTACT. Avoid contact with skin, eyes and clothing. Avoid contamination from any source Do not alter or tamper with venting mechanism.

Target organs: None known.

	0 = Minimal	Health	0
	1 = Slight	Fire	0
ð.	2 = Moderate 3 = Serious	Reactivity	1
	4 = Severe	Contact 1	
		HMIS	*

NEPA

0 - Minimal 1 = Slight

2 » Moderate

3 - Serious

4 = Severe

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool. Use water only to fight fires in which this material is involved. Apply vast amounts for cooling and dilution. This product is a strong oxidizer which may release oxygen and promote the combustion of flammable materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire. Do not allow temperature of storage to rise above 100°F.

Extinguishing Media: Use media suitable for extinguishing supporting fire.

Flash Point: N/A

Autoignition temperature: N/A

Explosion Limits: Lower: N/A Upper: N/A

Accidental Release Measures Section 6

Use proper personal protective equipment as indicated in Section 8. Remove all sources of ignition. Provide adequate ventilation. Recover for use if not contaminated. Dilute with water and absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

Section 7 Handling & Storage

sources.

GENERAL STORAGE CODE GREEN

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children. Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, spray or mist. Wash thoroughly after handling. Remove and wash clothing before reuse. Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition

Section 8 Exposure Controls / Personal Protection

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Boiling point: ~100°C (212°F) (water) Physical state: Liquid Freezing / Melting point: ~0°C (32°F) (water) Appearance: Clear, colorless. Decomposition temperature: N/A Odor: Slightly pungent odor. Solubility: Complete pH: N/A Vapor pressure (mm Hq): 14 (water) Specific gravity (H₂O = 1): ~1.0 Percent volatile (%): 100% Vapor Density (Air = 1): 0.7 (water) Evaporation rate (Butyl acetate = 1): < 1 Molecular formula: Mixture. Molecular weight: Mixture.

Section 10 Stability & Reactivity

Chemical stability: Stable

Viscosity: N/A

Hazardous polymerization: Will not occur Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition. Contact

with combustible materials may result in spontaneous combustion. Incompatibilities with other materials: Acids, bases, metals, metal salts, reducing agents, organic materials, alkalies, dust and dirt contaminants, flammable substances, oxidizable materials.

Hazardous decomposition products: Oxygen, which will promote the combustion of flammable material.

Toxicological Information Section 11

Effects of overexposure: EYES: Expected to cause irritation and/or burns. Could cause corneal damage which may occur several days later. SKIN: Expected to cause irritation and/or burns. As the concentration or time of exposure increases, the extent of damage increases. INHALATION: Expected to be irritating to respiratory tract. INGESTION: Expected to cause burns to the gastrointestinal tract. Medical conditions which may be appravated by exposure include conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases.

ORL-RAT LD50: 800 mg/kg (50% hydrogen peroxide)

Section 12

Ecological Information

Data not yet available.

Disposal Considerations Section 13

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Transport Information Section 14

Shipping name: Not Regulated.

UN/NA number: N/A Hazard class: N/A Packing group: N/A

Exceptions: N/A

Section 15

TSCA-listed, EINECS-listed (231-765-0), RCRA code D001, D002

Regulatory Information

Section 16 Additional Information

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