

# MATERIAL SAFETY DATA SHEET

## SECTION 1 — PRODUCT INFORMATION

Product Identifier:	pH Indicator Solution
Product Use:	Colorimetric testing
Supplier:	Synharise Chemical Inc.
Emergency Contact:	3E Company
Emergency Telephone:	1-(800)360-3220

## SECTION 2 — HAZARDOUS INGREDIENTS

Hazardous Ingredients	%	CAS Number	LD50 of Ingredient	LC50 of Ingredient
Methyl Orange	0.05%	547-58-0	Oral (rat): 60mg/Kg	Not Available
Methyl Red	0.15%	493-52-7	Not Available	Not Available
Bromothymol Blue	0.30%	76-59-5	Not Available	Not Available
Phenolphthalein	0.35%	79-09-8	Not Available	Not Available
Distilled Water	49.575%	7732-18-5	LD50 Oral-Rat- >90000mg/kg	Not available
Ethanol (denatured 2A) Contains; Isopropyl alcohol, Methyl alcohol, Water	49.575%	64-17-5 (ethyl alcohol), 7732-18-5 (water), 67-63-0 (Isopropyl alcohol), 67-56-1 (Methyl alcohol)	Ethanol; 7060 mg/kg (oral, rat) Methanol; 5628 mg/kg (oral, rat) Isopropanol; 5045 mg/kg (oral, rat)	Ethanol; 20000 ppm (Rat) (10 hour(s)). 39000 mg/m3 (Mouse) (4 hour(s)) Methanol; 5800 mg/kg (Mouse). 14200 mg/kg (Rabbit). Isopropanol 2735 mg/kg (rat)

## SECTION 3 — PHYSICAL DATA

Physical State :	Liquid
Odour & Appearance :	Red liquid with alcohol odor
Odour Threshold (ppm):	Not Available
Specific Gravity:	Not Available
Vapour Density (air = 1) :	Not Available
Vapour Pressure (mmHg) :	Not Available
Evaporation Rate:	Not Available
Boiling Point (°C) :	Not Available
Freezing Point (°C):	Not Available
pH	Not Available

## SECTION 4 — FIRE AND EXPLOSION DATA

Means of Extinction:	Flammable
Flashpoint and Method :	50% ethanol & water; 24 °C (75 °F) open cup
Upper Flammable Limit (% by volume) :	96% ethanol & water; 17 °C (63 °F)
Lower Flammable Limit (% by volume):	10% ethanol & water; 49 °C (120 °F)
Autoignition Temperature (°C):	70% ethanol & water; 363 °C (685 °F)
Explosion Data — Sensitivity to Impact:	No
Explosion Data — Sensitivity to Static Discharge:	No
Hazardous Combustion Products:	Nitrogen Oxides, Carbon Monoxide, Carbon Dioxide

## SECTION 5 — REACTIVITY DATA

Chemically Stable	Yes
Incompatibility:	Strong oxidizing agents
Conditions to be avoided:	N/A
Hazardous Decomposition Products:	Under fire conditions; Nitrogen Oxides, Carbon Monoxide, Carbon Dioxide

## SECTION 6 — TOXICOLOGICAL PROPERTIES

Routes of Exposure:	Ingestion, skin & eyes
Acute Exposure:	Harmful by ingestion, inhalation or skin absorption.
Chronic Exposure:	May cause allergic skin reactions with repeated exposure.

Exposure Limits: (value, source, date)	Ethanol;Exposure limit:ACGIH TWA 1000ppm(1880 mg/m <sup>3</sup> ) Methanol;Exposure limit:ACGIH TWA 200 ppm(262 mg/m <sup>3</sup> );STEL 250 ppm(328mg/m <sup>3</sup> ) (skin) Isopropanol;NIOSH REL &OSHA PEL: 400 ppm (980 mg/m <sup>3</sup> ) TWA Methyl Orange: Not Available Methyl Red: Not Available Bromothymol Blue: Not Available Phenolphthalein: Not Available
Irritancy:	May cause irritation.
Sensitization:	Not Available
Carcinogenicity:	Not Available
Reproductive Toxicity:	Not Available
Teratogenicity:	Not Available
Mutagenicity :	Not Available
Synergistic Products:	Not Available

#### SECTION 7 — PREVENTIVE MEASURES

Personal Protective Equipment:	Chemical resistant gloves, chemical safety goggles and lab coat/protective work clothing.
Handling:	Avoid contact with skin, eyes and clothing. Always wear protective gloves while working with product. Safety glasses are required to prevent injury. Wear appropriate protective clothing and boots as required to prevent skin contact. For field use, a rubber apron may be worn as additional protection. Use good industrial hygiene. Work carefully with the reagent and always wear protective equipment.
Leak and Spill Procedure:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.
Waste Disposal:	Dispose of according to local and regional authority requirements. Prevent from entering sewers, waterways or ground/soil.
Engineering Controls:	If user operations generate vapour or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Storage Requirements:	Store away from oxidizing agents.
Special Shipping Information:	UN#3316 - Chemical Kit, Class 9, Packing Group II

#### SECTION 8 — FIRST AID MEASURES

Inhalation:	Place victim in well-ventilated area. If victim is not breathing, perform artificial respiration. Seek immediate medical attention.
Ingestion:	Seek immediate medical help.
Skin Contact:	Immediately wash with water and soap and rinse thoroughly. Seek medical advice.
Eye Contact:	Rinse opened eye(s) for several minutes under running water. Then consult a doctor.

#### SECTION 9 — PREPARATION INFORMATION

Prepared by:	Syntharise Chemical Inc.
Telephone Number:	1(647)766-1657
Preparation Date:	January 13 <sup>th</sup> , 2016

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.