Kastle-Meyer Reagent



Section 1

Product Description

Product Name: Kastle-Meyer Reagent

Recommended Use: Science education applications

Synonyms: Phenolphthalein Potassium Hydroxide Solution

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER







Harmful if swallowed. Causes serious eye damage. Suspected of causing genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child.

GHS Classification:

Skin Corrosion/Irritation Category 1, Serious Eye Damage/Eye Irritation Category 1, Carcinogenicity Category 1B, Germ Cell Mutagenicity Category 2, Reproductive Toxicity Category 2, Acute Toxicity - Oral Category 4

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Acute Toxicity Dermal Contains
Acute Toxicity Inhalation Vapor

22 % of the mixture consists of ingredient(s) of unknown toxicity
22 % of the mixture consists of ingredient(s) of unknown toxicity

Contains

Acute Toxicity Inhalation Dust/Mist

Contains

Section 3

22 % of the mixture consists of ingredient(s) of unknown toxicity

Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Water
 7732-18-5
 78

 Potassium Hydroxide
 1310-58-3
 20

 Phenolphthalein
 77-09-8
 2

Section 4 First Aid Measures

Emergency and First Aid Procedures

In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin Contact: After contact with skin, wash immediately with plenty of water.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

None Known

Fire and/or Explosion Hazards:

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not flush spill to drain. Contain the discharged material. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container.

Section 7

Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Wear protective

gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Harmful

if swallowed. Avoid contact with skin and eyes. Do not ingest or take internally. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage: Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8

Protection Information

	ACG	<u>OSHA PEL</u>		
Chemical Name	<u>(TWA)</u>	(STEL)	(TWA)	(STEL)
Potassium Hydroxide	N/A	N/A	N/A	N/A
Phenolphthalein	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Respirator Type(s): NIOSH approved air purifying respirator with HEPA filter.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station

available

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Gloves: Neoprene, Nitrile, Nitrile - Extra Thick (8 mm)

Section 9

Physical Data

Formula: See Section 3 Molecular Weight: N/A

Appearance: Colorless White Liquid

Odor: None

Odor Threshold: No data available

pH: 7.0-9.0

Melting Point: 360 - 380 C Boiling Point: 100 C

Flash Point: No data available Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A Vapor Density (Air=1): N/A Specific Gravity: > 1 Solubility in Water: Soluble

Log Pow (calculated): No data available Autoignition Temperature: No data available Decomposition Temperature: No data available

Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Exposure to moisture

Incompatible Materials: Water-reactive materials, Acids, Halogenated Hydrocarbons, Metals, Maleic Anhydride,

Moisture, Water, Peroxides, Strong oxidizing agents

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Ingestion, Skin contact.

Symptoms (Acute):

Delayed Effects: No data available

Acute Toxicity:

Chemical Name CAS Number Oral LD50 Dermal LD50 Inhalation LC50

Water 7732-18-5 Oral LD50 Rat

90000 mg/kg

Potassium Hydroxide 1310-58-3 Oral LD50 Rat 273

mg/kg

Phenolphthalein 77-09-8

Carcinogenicity:

Chemical NameCAS NumberIARCNTPOSHAPotassium Hydroxide1310-58-3Not listedNot listedNot listedPhenolphthalein77-09-8ListedListedListed

Chronic Effects:

Mutagenicity: Evidence of a mutagenic effect.

Teratogenicity: Evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect. **Reproductive:** Evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2

Chronic: Mutation data cited., Listed by NTP, IARC as causing cancer.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.

Mobility: No data

Persistence: Dissolved into water, Adsorbs to soil/solids

Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical NameCAS NumberEco ToxicityWater7732-18-5No data available

Potassium Hydroxide 1310-58-3 96 HR LC50 GAMBUSIA AFFINIS 80 MG/L [STATIC]

Phenolphthalein 77-09-8

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Air - IATA Proper Shipping Name:

UN1814, Potassium Hydroxide Solution, 8, II, 1000 UN1814, Potassium Hydroxide Solution, 8, II, 1000

Section 15 Regulatory Information **TSCA Status:** All components in this product are on the TSCA Inventory. **Chemical Name** CAS § 313 Name § 304 RQ **CERCLA RQ** § 302 TPQ **CAA 112(2)** Number Potassium Hydroxide 1310-58-3 1000 lb 1000 lb final No No No RQ RQ (454 kg) Phenolphthalein 77-09-8 Phenolphthale No No No No in

California Prop 65:



WARNING: Cancer - www.P65Warnings.ca.gov

Section 16	Additional
	Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health