SAFETY DATA SHEET

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Part Number K9084LL

Product Name (Chemical Name, Trade Name, etc.)  Buffer solution for calibration (pH4)

Composition/Information on Ingredients
  Single Product/Mixture Product:  Single Product
  Chemical Name (Synonyms):  Potassium hydrogen phthalate
  Ingredient /Content:  250 mL of 0.05mol/kg Potassium hydrogen phthalate,  6 bottles
  Formula:  KHC₈H₄O₄
  CAS No.:  877-24-7

GHS Classification:  Not Classified

Other Information:  Refer to next page “Phthalate pH Standard solution, pH4.01” MSDS
Material Safety Data Sheet

1. Product and company identification
   Product name : Phthalate pH standard solution, pH 4.01
   Name of manufacturer : KANTO CHEMICAL CO., INC.
   Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
   Name of section : Reagent division, catalog and products information section
   Telephone number : +81-3-6214-1090
   Facsimile number : +81-3-3241-1047
   Mail address : BC32@gms.kanto.co.jp
   MSDS No. : 32798

2. Summary of danger and Hazard
   GHS classification
   Physical and chemical hazard
     Flammable liquids : Out of category
     Pyrophoric liquids : Out of category
   Human health hazard
     Acute toxicity(oral) : Out of category
     Acute toxicity(dermal) : Out of category
     Skin corrosion·Irritation : Out of category
     Serious eye damage·Eye irritation : Out of category
     Specific target organ systemic toxicity(single exposure) : Out of category
     Specific target organ systemic toxicity(repeated exposure) : Out of category
   Environmental hazard
     Hazardous to the aquatic environment-acute hazard : Out of category
     Hazardous to the aquatic environment-chronic hazard : Out of category

3. Composition/Information on ingredients
   Substance/Mixture : Substance
   Chemical name or commercial name : Potassium hydrogen phthalate
   Ingredients and composition : Water solution contains 1% Potassium hydrogen phthalate
   Chemical formula : C6H4(COOK)(COOH)
CAS No. : 877-24-7

4. First aid measures
   Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.
   Skin contact : Wash the affected areas under running water.
   Eye contact : Wash the affected areas under running water.
   Ingestion : Give the victim water immediately.

5. Fire fighting measures
   Extinguishing media : This product is noncombustible.
   Prohibited extinguishing media : None
   Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

6. Accidental release measures
   Cautions for personnel : If necessary, wear proper protective equipment.
   Cautions for environment : Nothing particular
   Removal measure : Absorb spill with paper or cloth.

7. Cautions of handling and storage
   Handling
   Engineering measures : Avoid contact with skin.
   Storage
   Adequate storage condition : Store in a dark, cool place and tightly closed.
   Safety adequate container materials : Glass, polyethylene, polypropylene

8. Exposure control/Personal protection
   Engineering measures : Install a local ventilation system under dense vapor or dusty condition.
   Control parameters
   ACGIH(2009) : Not established
   Protective equipment
   Respiration protective equipment : Not necessary
   Hands protective equipment : If necessary, wear gloves.
   Eyes protective equipment : If necessary, wear goggles.

9. Physical and chemical properties
   Appearance : Liquid
   Color : Colorless

Kanto Chemical Co., Inc.
Odor : Odorless
pH : 4.01
Boiling point : Approx. 100°C
Melting point : Approx. 0°C
Flash point : Noncombustible
Specific gravity : about 1.0g/ml
Solubility
   Solubility in solvents : Water : Freely soluble

10. Stability and reactivity
   Stability : Stable under normal usage.
   Incompatible conditions : Light, heat

11. Toxicological information
   Acute toxicity : Oral : Out of category
                    Dermal : Out of category
                    Inhalation(vapor) : Not possible to classify because of insufficient data.
                    Inhalation(dust, mist) : Not possible to classify because of insufficient data.
                    If swallowed a large dose, may cause nausea.
                    (as Potassium hydrogen phthalate)
                    rat oral LD50>3200mg/kg
                    guinea pig skin LD50>1g/kg
   Skin corrosiveness : Out of category
                        Low irritation to skin.
   Irritation to skin, eyes : Not possible to classify because of insufficient data.
                            Slight irritation of eyes.
   Respiratory sensitization or Skin sensitization
                        Respiratory sensitization : Not possible to classify because of insufficient data.
                        Skin sensitization : Not possible to classify because of insufficient data.
   Mutagenicity : Not possible to classify because of insufficient data.
   Carcinogenic effects : Not possible to classify because of insufficient data
   Effects on the reproductive system
                        Not possible to classify because of insufficient data.
   Specific target organ systemic toxicity single exposure
                        Not possible to classify because of insufficient data.
                        The product is 1% of Potassium hydrogen phthalate water solution and do not have particular human health hazards.
   Specific target organ systemic toxicity repeated exposure
                        Not possible to classify because of insufficient data.
                        The product is 1% of Potassium hydrogen phthalate water solution and do not have particular human health hazards.
   Aspiration hazard : Not possible to classify because of insufficient data.
12. Ecological information

Ecotoxicity

Fish toxicity: Acute aquatic toxicity: Not possible to classify because of insufficient data.
Chronic aquatic toxicity: Not possible to classify because of insufficient data.

Removal ability and degradability:
Mobility: Not available

13. Disposal consideration

Residual disposal: Dilute the chemical with a large amount of water and flush in a drain after neutralizing with alkaline substances. Or consult approved disposal companies.

Containers: In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class: Not applicable

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References
Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd. (1963)

The information contained herein is based on several references and the present state of our knowledge. However, the MSDS does not always cover all information about the product. Handle the product carefully. The information is intended to ordinary usage. In case of particular handle, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.