



Preparing for the New Era of Laboratories

MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

POTASSIUM HYDROGEN PHTHALATE 99,5% AR

PRODUCT CODE : O-5150

CAS No : 877-24-7

FORMULA : $\text{C}_8\text{H}_5\text{KO}_4$

UN No : Not Applicable

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Name** : POTASSIUM HYDROGEN PHTHALATE 99,5%
- Synonyms** : Potassium acid phthalate; 1,2 Benzenedicarboxylic acid monopotassium salt; Phthalic acid monopotassium salt; Hydrogen Potassium Phthalate, Potassium biphthalate, KHP
- CAS No.** : 877-24-7
- HS Code** : 2917 39 90
- Chemical Formula** : $C_8H_5KO_4$ (Hill)
- Molecular Weight** : 204.22 g/mol
- Product Code** : O-5150
- Brand** : Labotiq
- 1.2 Manufacturer** : Labotiq
- Address** : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
- Website** : www.labotiq.net
- Email** : labotiq.id@gmail.com
- For information** : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710
- Emergency number** : +6281316894650
- 1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

- Synonyms** : KHP , Potassium biphthalat, Potassium phthalate monobasic, Phthalic acidmonopotassium salt, Potassium hydrogen phthalate
- Formula** : $C_8H_5KO_4$ (Hill)
- Molecular weight** : 204.22 g/mol
- CAS-No.** : 877-24-7
- EC-No.** : 212-889-4

3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Potassium oxides, Not combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriat engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740, Size M)

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

Splash contact

Material: Nitrile rubber
 Minimum layer thickness: 0.11 mm
 Break through time: 480 min
 Material tested: Dermatrill® (KCL 740, Size M)

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
 Recommended

Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: Crystalline solid
	Color: white
Odour	No data available
Odour Threshold	No data available
pH	4
Melting point/freezing point	Melting point/range: 295 - 300 °C - dec
Initial boiling point and boiling range	> 300 °C at 977,5 hPa - OECD Test Guideline 103
Flash point	197,3 °C - Pensky-Martens closed cup
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1,571 g/cm ³ at 20 °C
Water solubility	93 g/l at 30 °C - OECD Test Guideline 105
Partition coefficient: octanol/water	log Pow: <= -3,9 at 30 °C - Bioaccumulation is not expected.
Auto-ignition temperature	does not ignite
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	none

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents, Nitric acid

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - > 3.200 mg/kg

Remarks: (ECHA) Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

slight irritation

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc. (ECHA)

Respiratory or skin sensitisation

In vitro study

Result: negative (OECD Test Guideline 442D)

Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
POTASSIUM HYDROGEN PHTHALATE 99,5% AR

MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Potassium hydrogen phthalate)

Specific target organ toxicity - single exposure

No data available(Potassium hydrogen phthalate)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Potassium hydrogen phthalate)

Additional Information

RTECS: CZ4326000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish

static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to algae

static test ErC50 - Desmodesmus subspicatus (green algae) - 329,5 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria

Remarks: (ECHA) (potassium hydrogen phthalate)

12.2 Persistence and degradability

Biodegradability

Result: 97,34 % - Readily biodegradable. (OECD Test Guideline 301D)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Further information

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
POTASSIUM HYDROGEN PHTHALATE 99,5% AR



MSDS Number : 0284

Date : Aug 28th, 2024

Version : 1.0

Version : 1.0

Revision Date : August 28, 2024