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Hefei TNJ Chemical Industry Co.,Ltd.

B911 Xincheng Business Center,
Qianshan Rd. Hefei 230022 China

Tel : (0086) 551 65418677

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

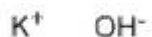
Technical Data Sheet

Potassium hydroxide

Product Information

Chemical Name Potassium hydroxide

Chemical structure



CAS # 1310-58-3

EINECS 215-181-3

Formula HKO

Molecular Weight 56.11

Synonyms POTASH;POTASH CAUSTIC;POTASH LYE;POTASSIUM HYDRATE;

Description

White flakes, pearls or colorless liquid. Soluble in water, soluble in ethanol, slightly soluble in ether.

Physical Properties

Melting point 361°C (lit.)

Boiling point 1320 °C

Density 1.450 g/mL at 20 ° C

Vapor pressure 1 mm Hg (719 ° C)

Refractive index n₂₀ / 1.421

Storage conditions 0-6° C

Flash point 52 ° F

Water solubility H₂O: 1 M at 20 °C, clear, colorless

Sensitivity Stable, but very hygroscopic. Dissolves exothermically in water. Incompatible with most metals, strong acids, acid chlorides, organic materials, zinc, aluminium, nitroalkanes, nitrobenzene, chlorine dioxide.

Reacts vigorously with a wide variety of other materials. Readily absorbs water and carbon dioxide from the air.

Specification

1) Potassium hydroxide 90% Flakes

Appearance	White Flakes
Assay, %	≥ 90.00
Potassium carbonate, %	≤ 0.50
Chloride (Cl), %	≤ 0.005
Fe, %	≤ 0.0005
Sulfate (SO ₄), %	≤ 0.005
Nitrate and nitrite, %	≤ 0.0005
Na, %	≤ 0.80
Phosphate (PO ₄), %	≤ 0.005
Silicate (SiO ₃), %	≤ 0.01
Al, %	≤ 0.002
Ca, %	≤ 0.005
Ni, %	≤ 0.0005
Heavy metals (Pb), %	≤ 0.002

2) Potassium hydroxide 90% Pearls

Appearance	White Pearls
Particle size	1~2mm
Assay, %	≥ 90.00
Potassium carbonate, %	≤ 1.0
Chloride (Cl), %	≤ 0.01
Fe, %	≤ 0.0005
Sulfate (SO ₄), %	≤ 0.005
Nitrate and nitrite, %	≤ 0.0005
Na, %	≤ 1.0
Phosphate (PO ₄), %	≤ 1.0
Silicate (SiO ₃), %	≤ 0.01
Al, %	≤ 0.002
Ca, %	≤ 0.005
Ni, %	≤ 0.0005
Heavy metals (Pb), %	≤ 0.002

3)Potassium hydroxide 48%

Appearance	Clear liquid
KOH, %	≥ 48.00
Potassium carbonate, %	≤ 0.10
Chloride (Cl), %	≤ 0.0025
Fe, %	≤ 0.0025
Na, %	≤ 0.40
Al, %	≤ 0.0006
Ca, %	≤ 0.0002
Heavy metals (Pb), %	≤ 0.002

Applications

- 1) In the pharmaceutical industry, used for the production of potassium boron hydrogen, spironolactone, ShaGan alcohol, progesterone and testosterone propionate, etc..
- 2) In the light industry,used for the production of potash soap, alkaline battery,etc.
- 3) In the Cosmetics industry,used for the production of cold cream, cold cream and shampoo,etc.
- 4) In the dye industry, used for the production of VAT dye, such as VAT blue RSN.
- 5) In the electrochemical industry, used in electroplating, carving, etc.
- 6) In the textile industry, used for printing and dyeing, bleaching and mercerizing, and synthetic fiber, polyester fiber,etc.
- 7) Also used for metallurgy heating agent and leather degreasing, etc.
- 8) Used as acid and alkali neutralization solution pH adjustment.Basic chemical reagent, carbon dioxide absorption agent.Saponifying agent,etc.

Packaging

-- 90% Solid (Flakes or Pearls)

25kg per woven bag,total 22 MT per 20ft container with pallets,25 MT without pallets.

-- 48% Solution

1500kg IBC DRUM,total 24 MT per 20ft container.

Safety & Storage & Handling

Stored in cool and airy place; away from fire and heat; handle with care;no breakage, avoid leakage.

It is valid for 2 years under proper condition.

Potassium hydroxide is classified as Dangerous Good for transport (UN 1813, Class 8, Packing group II)

Please refer to MSDS for more information about Safety, Storage and Transportation.