

**POTASSIUM HYDROXIDE CPECTROSOL® IN  
METHANOL 1M (1N) STANDARDIZED SOLUTION  
IN ACCORDANCE WITH NIST**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

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

**1.1 Product identifiers**

Product name : Potassium Hydroxide in Methanol CPECTROSOL® 1M (1N) Standardized Solution In Accordance with NIST

Product Code : 877923

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Flammable liquid (Category 2), H225  
Acute toxicity, oral (Category 3), H301  
Acute toxicity, inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Skin irritation (Category 2), H315  
Specific target organ toxicity-single exposure, (Category 1) H370

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Warning

Hazard statement(s)

H225

Highly flammable liquid and vapour.

H290

May be corrosive to metals.

H301 + H311 + H331 H314 H370	Toxic if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. Causes damage to organs (Eyes).
Precautionary statement(s) P210	Keep away from heat, hot surfaces, sparks, open flames and ignition sources. No smoking.
P240 P280	Ground/ bond container and receiving equipment. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 P302 + P352 P304 + P340	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P310	IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.
P403 + P223	Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard Statements	none

### 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 Mixtures

Formula : KOH  
Molecular weight : 56.11 g/mol

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

Hazardous ingredients according to Regulation (EC) No. 1272/2008		Classification	Concentration
Component			
<b>Potassium hydroxide</b>			
CAS-No.	1310-58-3	Met. Corr. 1; Acute Tox. 4;	>= 5 - < 10 %
EC-No.	215-181-3	Skin Corr. 1A; H290, H302,	
Index-No.	019-002-00-8	H314	
Registration number	01-2119487136-33-XXXX	Concentration limits:	
		>= 5 %: Skin Corr. 1A, H314; 2 - < 5 %: Skin Corr. 1B, H314: 0.5 - < 2 %: Skin Irrit. 2.	
<b>Methanol</b>			
CAS-No.	67-56-1	Flam. Liquid 2; Acute Tox. 3; Acute tox. 3; Acute tox. 3; Specific target organ toxicity- single exposure 1;H225, H301, H331, H311, H370;	>=75 - 99 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

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

#### If inhaled

Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.

#### In case of skin contact

Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

**In case of eye contact**

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes.

**If swallowed**

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

**4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms relating to use:** Repeated exposure to this material can result in absorption through skin causing significant health hazard. Causes damage to organ. Causes severe skin burns and eye damage. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

**4.3 Indication of any immediate medical attention and special treatment needed**

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Specific treatment (see on this label). Call a POISON CENTER or doctor.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

**Suitable extinguishing media:** Foam, Dry powder, carbon dioxide, water spray, sand.

**Unsuitable extinguishing media:** Do not use a heavy water stream.

**Surrounding fires:** Use water spray or fog for cooling exposed containers.

**5.2 Special hazards arising from the substance or mixture**

Under fire conditions, hazardous fumes will be present. Thermal decomposition generates: Corrosive vapours.

**5.3 Advice for firefighters**

**Protection against fire:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures:** Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**5.4 Further information**

No data available

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

**For emergency responders:** Equip cleanup crew with proper protection. Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.

**For non-emergency personnel:** Evacuate unnecessary personnel.

**6.2 Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

**6.3 Methods and materials for containment and cleaning up**

**Clean up methods:** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

**6.4 Reference to other sections**

See section 8. Exposure controls/personal protection

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

**Handling:** Avoid contact during pregnancy or while nursing. Do not breathe dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.

**Technical protective measures:** Provide good ventilation in process area to prevent formation of vapour.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage:** Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage regulation:** Comply with applicable regulations.

**Storage- away from:** Strong bases, strong acids, sources of ignition, direct sunlight.

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>
Consumers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>

### 8.2 Exposure controls

#### Appropriate 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

Safety glasses with side-shields conforming to EN166 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.

##### Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### 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

- |   |                                    |
|---|------------------------------------|
| a) Appearance                                   | Form: liquid<br>Colour: Colourless |
| b) Odour  | No data available                  |
| c) Odour Threshold                              | No data available                  |
| d) pH   | No data available                  |
| e) Melting point/freezing point                 | No data available                  |
| f) Initial boiling point and boiling range      | No data available                  |
| g) Flash point                                  | No data available                  |
| h) Evaporation rate                             | No data available                  |
| i) Flammability (solid, gas)                    | No data available                  |
| j) Upper/lower flammability or explosive limits | No data available                  |

k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	Soluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

## 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5 Incompatible materials

Strong acids, Strong bases.

### 10.6 Hazardous decomposition products

**Hazardous decomposition products:** Fumes, Carbon monoxide, Carbon dioxide. Thermal decomposition generates: Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### 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

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6 Other adverse effects**

**Environmental precautions:** Avoid release to the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 2924

IMDG: 2924

IATA: 2924

**14.2 UN proper shipping name**

ADR/RID: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (CONT. METHANOL, POTASSIUM HYDROXIDE)

IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (CONT. METHANOL, POTASSIUM HYDROXIDE)

IATA: Flammable liquid, corrosive, N.O.S. (CONT. METHANOL, POTASSIUM HYDROXIDE)

**14.3 Transport hazard class(es)**

ADR/RID: 3

IMDG: 3

IATA: 3

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

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**

A Chemical Safety Assessment has been carried out for this substance.

## **SECTION 16: Other information**

### **Full text of H-Statements referred to under sections 2 and 3.**

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage
H331	Toxic if inhaled.
H370	Causes damage to organs.

### **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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.