

C/D/N ISOTOPES INC.

88 Leacock Street
Pointe-Claire, Quebec H9R 1H1
Toll-Free (Canada & USA): 1-800-565-4696
Tel.: 1-514-697-6254 • Fax: 1-514-697-6148
www.cdnisotopes.com

**MATERIAL SAFETY DATA SHEET**

Tel : 05.57.46.00.44
Fax : 05.57.46.53.96
cil@cluzeau.fr
www.cluzeau.com

Sheet No. 10460**SECTION 1: PRODUCT IDENTIFICATION**

Catalog No.: D-30
Product Name: Potassium Deuterioxide (40% w/w in D₂O)
CAS No.: 24572-01-8

SECTION 2: CHEMICAL INFORMATION (UNLABELLED)

Chemical Name: POTASSIUM DEUTEROXIDE (40% in D₂O)
CAS No.: 1310-58-3
Synonyms: Potassium Hydroxide Solution

SECTION 3: HAZARDS IDENTIFICATION

Known Hazards: CORROSIVE, IRRITANT

SECTION 4: FIRST AID MEASURES

Skin Contact: Wash with water.
Ingestion: Medical assistance for gastric lavage.
Inhalation: Remove to fresh air, artificial respiration or oxygen if necessary.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Carbon dioxide, dry chemical powder, foam, water.
Special Fire Fighting Equipment: Wear a self-contained breathing apparatus and protective clothing.
Unusual Fire and Explosion Hazards: Reacts with metals to produce flammable hydrogen gas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
Spill Clean-up Methods: Provide adequate ignition-proof ventilation. Carefully neutralize with diluted acid. Carefully absorb on vermiculite and transfer to a closed container.

SECTION 7: HANDLING AND STORAGE

Usage/Handling Precautions: Fumehood to meet TLV requirements
Storage Conditions: Store at room temperature. Adequate ventilation. Protect from air. Protect from moisture.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory Protection: Self-contained breathing apparatus or chemical cartridge.
Hand Protection: Chemical-resistant gloves, solvent-resistant gloves.
Eye Protection: Wear safety goggles.
Other Protective Equipment: Protective clothing.
Other Protective Measures: Provide safety showers and eyewash station near workplace.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Colourless liquid		
Boiling Point (°C):	140	Density (g/cm³):	1.46
Melting Point (°C):	> 4	pH:	13.5
Vapour Pressure (mm Hg):	13 (60°C)	Volatiles (%):	60
Water Solubility (%):	100		
Flash Point (°C):	Not applicable.		
Autoignition Temperature (°C):	Not available.		

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable.
Incompatibility (Materials to Avoid):	Acids. Reducing agents. Halogens.
Hazardous Decomposition Products:	Hydrogen on reaction with metals.

SECTION 11: TOXICOLOGICAL INFORMATION**Acute and Chronic Health Hazards**

Oral LD₅₀:	273 mg/kg (rat)*	Dermal Severe:	50 mg (rabbit, 24 hrs.)*
TLV:	2 mg/m ³ (ceiling).		
Note:	* Solid Potassium Hydroxide data.		

Effects of Overexposure: Severe corrosive (contact). Irritation (eyes, skin). Stricture of esophagus. Collapse. Death.

SECTION 12: ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Procedures: Via licensed disposal company. Dispose of according to federal and local regulations.

SECTION 14: TRANSPORT INFORMATION

Contact C/D/N Isotopes Inc.

SECTION 15: REGULATORY INFORMATION

TLV: 2 mg/m³ (ceiling).

SECTION 16: OTHER INFORMATION

This product is not radioactive. The data given for this product are those of the corresponding unlabelled product indicated in Section 2, unless specifically indicated otherwise. Safety data for the labelled compounds are generally unavailable but the hazards and properties are assumed to be similar or identical to those of the unlabelled compounds. While the information set forth is believed to be accurate, C/D/N ISOTOPES INC. extends no warranties with respect hereto and disclaims all liabilities from reliance thereon. All judgements as to the suitability of the data presented with respect to the use of this product are the responsibility of the purchaser and intended user.

Date: January 1, 2014

C/D/N ISOTOPES INC.


Vincent Guay, Ph.D.