

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/07/2014

Revision date: 20/10/2017

Supersedes: 09/07/2014

Version: 2.0

DLM-3115	

Product form : Mixtures Product name : POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O) Product code : DLM-3115 <b>1.2.</b> Relevant identified uses of the substance or mixture and uses advised against <b>1.2.1.</b> Relevant identified uses Main use category : Professional use Industrial/Professional use spec : For professional use only <b>1.2.2.</b> Uses advised against No additional information available <b>1.3.</b> Details of the supplier of the safety data sheet Cambridge lsotope Laboratories, Inc. 30 Frontage Road Andover, MA 01810 USA: 1-800-322-1174 Int: 1-978-749-8000 clisales@istope.com www.isotope.com Emergency telephone number Emergency telephone number Eme		
Product form : Mixtures Product name : POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O) Product code : DLM-3115 <b>1.2.</b> Relevant identified uses of the substance or mixture and uses advised against <b>1.2.1.</b> Relevant identified uses Main use category : Professional use Industrial/Professional use spec : For professional use only <b>1.2.2.</b> Uses advised against No additional information available <b>1.3.</b> Details of the supplier of the safety data sheet Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA : L800-322-1174 Int: 1-978-749-8000 citsales @isotope.com www.isotope.com Emergency telephone number Emergency telephone number Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Corr. 1 H290 Acute Tox. 4 (Ora) H392 Skin Corr. 1A H314 Eye Dam. 1 H318	SECTION 1: Identification of the	substance/mixture and of the company/undertaking
Product name : POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O) Product code : DLM-3115 <b>1.2. Relevant identified uses of the substance or mixture and uses advised against</b> <b>1.2.1. Relevant identified uses</b> Main use category : Professional use Industrial/Professional use spec : For professional use only <b>1.2.2. Uses advised against</b> No additional information available <b>1.3. Details of the supplier of the safety data sheet</b> Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-1174 Int: 1-978-749-8000 citaales @Isotope.com www.isotope.com Emergency telephone number Emergency telephone number Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Cor. 1 H290 Acute Tox. 4 (Ora) H302 Skin Cor. 1A H314 Eye Dam. 1 H318	1.1. Product identifier	
Product code : DLM-3115 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Main use category : Professional use Industrial/Professional use spec : For professional use only 1.2.2. Uses advised against No additional information available 1.3. Details of the supplier of the safety data sheet Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales discobe_com www.isotope.com Emergency telephone number Emergency telephone number Emergency numbers: Cherntres: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Cor. 1 H290 Acute Tox. 4 (Ora) H302 Skin Cor. 1A H314 Eye Dam. 1 H318	Product form	: Mixtures
1.2. Relevant identified uses         Main use category       Professional use         Industrial/Professional use spec       For professional use only         1.2.1. Uses advised against         No additional information available         1.3. Details of the supplier of the safety data sheet         Cambridge Isotope Laboratories, Inc.         50 Frontage Road         Andover, MA 01810         USA:         USA:         No additional information         Statistication according to Regulation (24 hours)         Intermet:       1-800-424-9300 (24 hours)         SteCTION 2: Hazards identification         21. Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Acute Tox. 4 (Oral) H302         Skin Corr. 1A       H318	Product name	: POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)
1.2.1. Relevant identified uses         Main use category       : Professional use         Industrial/Professional use spec       : For professional use only         1.2.2. Uses advised against         No additional information available         1.3. Details of the supplier of the safety data sheet         Cambridge Isotope Laboratories, Inc.         50 Frontage Road         Andover, MA 01810         USA         USA: 1-800-322-1174 Int: 1-978-749-8000         cisalese @isotope.com         www.isotope.com         Emergency telephone number         Emergency numbers:         Chemtre: 1-800-424-9300 (24 hours)         International: 1-703-741-5970 (24 hours)         SECTION 2: Hazards identification         2.1. Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Acute Tox. 4 (Oral) H302       Skin Corr. 1         Skin Corr. 1A       H314         Eye Dam. 1       H318	Product code	: DLM-3115
Main use category : Professional use Industrial/Professional use spec : For professional use only <b>1.2.2. Uses advised against</b> No additional information available <b>1.3. Details of the supplier of the safety data sheet</b> <b>Cambridge Isotope Laboratories, Inc.</b> 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-1174 Int: 1-978-749-8000 citisales@isotope.com www.isotope.com <b>Emergency telephone number</b> Emergency telephone number Emergency telephone number Emergency telephone number SCTION 2: Hazards identification <b>2.1. Classification of the substance or mixture</b> <b>Classification according to Regulation (EC) No. 1272/2008 [CLP]</b> Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318	1.2. Relevant identified uses of the	substance or mixture and uses advised against
Industrial/Professional use spect       :       For professional use only         1.2.2.       Uses advised against       No additional information available         1.3.       Details of the supplier of the safety data sheet       Cambridge lsotope Laboratories, Inc. 50 Frontage Road         20mbridge lsotope Laboratories, Inc. 50 Frontage Road       Andover, MA 01810         USA       USA       USA         USA       1.800-322-1174       Int: 1-978-749-8000         classles@isotope.com       www.isotope.com         Emergency telephone number       Emergency telephone number         Emergency numbers:       Chemtre: 1-800-424-9300 (24 hours)         International : 1-703-741-5970 (24 hours)       SECTION 2: Hazards identification         2.1.       Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Wet. Corr. 1       H290         Acute Tox. 4 (Oral) H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	1.2.1. Relevant identified uses	
1.2.2. Uses advised against         No additional information available         1.3. Details of the supplier of the safety data sheet         Cambridge Isotope Laboratories, Inc.         So Frontage Road         Andover, MA 01810         USA         USA: 1-800-322-1174         Int: 1-978-749-8000         citsales@isotope.com         www.isotope.com         Emergency telephone number         Emergency addition         2.1. Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Acute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	Main use category	: Professional use
No additional information available          1.3.       Details of the supplier of the safety data sheet         Cambridge Isotope Laboratories, Inc.       50 Frontage Road         Andover, MA 01810       USA         USA       USA         USA:       1.800-322-1174         Int:       1.978-749-8000         citaales@isotope.com       www.isotope.com         Emergency telephone number         Emergency telephone number         Emergency 1.800-422-9300       (24 hours)         International:       1.703-741-5970         SECTION 2: Hazards identification         2.1.       Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Accute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	Industrial/Professional use spec	: For professional use only
No additional information available          1.3.       Details of the supplier of the safety data sheet         Cambridge Isotope Laboratories, Inc.       50 Frontage Road         Andover, MA 01810       USA         USA       USA         USA:       1.800-322-1174         Int:       1.978-749-8000         citaales@isotope.com       www.isotope.com         Emergency telephone number         Emergency telephone number         Emergency 1.800-422-9300       (24 hours)         International:       1.703-741-5970         SECTION 2: Hazards identification         2.1.       Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Accute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	1.2.2. Uses advised against	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-1174 Int: 1-978-749-8000 Cilsales@Isotope.com www.isotope.com Emergency telephone number Emergency numbers: Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318	No additional information available	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com Emergency telephone number Emergency numbers: Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318	1.3. Details of the supplier of the sa	fety data sheet
Emergency telephone number         Emergency numbers:         Chemtrec: 1-800-424-9300 (24 hours)         International: 1-703-741-5970 (24 hours)         SECTION 2: Hazards identification         2.1.       Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Acute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318		0
Emergency numbers: Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318		
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours) SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318		
Classification of the substance or mixture         Classification according to Regulation (EC) No. 1272/2008 [CLP]         Met. Corr. 1       H290         Acute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	Emergency numbers: Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)	
Classification according to Regulation (EC) No. 1272/2008 [CLP]Met. Corr. 1H290Acute Tox. 4 (Oral)H302Skin Corr. 1AH314Eye Dam. 1H318	<b>SECTION 2: Hazards identification</b>	n
Met. Corr. 1       H290         Acute Tox. 4 (Oral)       H302         Skin Corr. 1A       H314         Eye Dam. 1       H318	2.1. Classification of the substance	or mixture
Acute Tox. 4 (Oral)H302Skin Corr. 1AH314Eye Dam. 1H318		C) No. 1272/2008 [CLP]
Skin Corr. 1A H314 Eye Dam. 1 H318		
Eye Dam. 1 H318		
	,	

# Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R23/25 C; R35 Xn; R20/22 Xi; R41 Full text of R-phrases: see section 16

## **GHS-US** classification

Met. Corr. 1 H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1A H314 Eye Dam. 1 H318

Full text of H statements : see section 16

# Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 22 Lah مام ام

2.2. Label elements	
Labelling according to Reg	llation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS05 GHS07
Signal word (CLP)	: Danger
Hazardous ingredients	: POTASSIUM DEUTEROXIDE (D, 97-99%)
Hazard statements (CLP)	: H290 - May be corrosive to metals
, , , , , , , , , , , , , , , , , , ,	H302 - Harmful if swallowed
	H314 - Causes severe skin burns and eye damage
Precautionary statements (CL	P) : P234 - Keep only in original container P260 - Do not breathe dust, fume, gas, mist, spray, vapours
	P264 - Wash hands, forearms and face thoroughly after handling
	P270 - Do not eat, drink or smoke when using this product
	P280 - Wear protective clothing, protective gloves P301+P312 - IF SWALLOWED: Call a doctor, a POISON CENTER if you feel unwell
	P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water/shower
GHS-US labelling	
Hazard pictograms (GHS-US)	
	GHS05 GHS07
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	
	H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage
Precautionary statements (GI	
r recountinary statements (Cr	P260 - Do not breathe dust, fume, gas, mist, spray, vapours
	P264 - Wash hands, forearms and face thoroughly after handling
	P270 - Do not eat, drink or smoke when using this product P280 - Wear protective clothing, protective gloves
	P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell
	P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
	P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
	P304+P340 - If inhaled: Remove person to fresh air and keep 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 P310 - Immediately call a doctor, a POISON CENTER
	P321 - Specific treatment (see Hazardous component(s) for labelling on this label)
	P330 - Rinse mouth
	P363 - Wash contaminated clothing before reuse P390 - Absorb spillage to prevent material damage
	P405 - Store locked up
	P406 - Store in corrosive resistant container with a resistant inner liner
	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
2.3 Other hazards	

2.3. **Other hazards** 

No additional information available

# **SECTION 3: Composition/information on ingredients**

**Substances** 3.1.

Not applicable

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
DEUTERIUM OXIDE (D, 99.9%)	(CAS No) 7789-20-0 (EC No) 232-148-9	60 - 70	Not classified
POTASSIUM DEUTEROXIDE (D, 97-99%)	(CAS No) 24572-01-8 (EC No) 246-324-8	30 - 40	Xn; R22 C; R35 T; R23
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
DEUTERIUM OXIDE (D, 99.9%)	(CAS No) 7789-20-0 (EC No) 232-148-9	60 - 70	Not classified
POTASSIUM DEUTEROXIDE (D, 97-99%)	(CAS No) 24572-01-8 (EC No) 246-324-8	30 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1A, H314
Name	Product identifier	%	GHS-US classification
POTASSIUM DEUTEROXIDE (D, 97-99%)	(CAS No) 24572-01-8	30 - 40	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

## Full text of R- and H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physiciar Call a POISON CENTER or doctor/physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritatio occurs: Wash off with soap and plenty of water. Consult a physician. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label). If skin irritation or rash occurs: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy t do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/injuries	: May damage fertility.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation. May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes severe skin burns.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed. 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

No additional information available

<b>SECTION 5: Fire-fighting measur</b>	es
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.
5.2. Special hazards arising from the	e substance or mixture
Reactivity	: Not available.
5.3. Advice for firefighters	
Firefighting instructions	<ul> <li>The product itself does not burn. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.</li> </ul>
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

26, 2012 / Rules and Regulations	
<b>SECTION 6: Accidental release mea</b>	sures
6.1. Personal precautions, protective ec	uipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Avoid breathing vapors, mist, or gas. Evacuate unnecessary personnel.
6.1.2. For emergency responders	. Do not attempt to take action without avitable protective actionment. For further information
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
	y authorities if liquid enters sewers or public waters.
6.3. Methods and material for containme	•
For containment	: Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Vacuum with an equipment that avoids ignition risk. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
For further information refer to section 8: "Expos	sure controls/personal protection".
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or
The could for bare handling	smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist or spray.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash Both hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, includi	ng any incompatibilities
Technical measures	: Keep container tightly closed in a dry and well-ventilated space.
Storage conditions	: Store at room temperature away from light and moisture.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pers	onal protection
8.1. Control parameters	
-	
POTASSIUM DEUTEROXIDE (D, 97-99%) (24	
USA OSHA OSHA PEL (T	WA) (mg/m³)       2 mg/m³ Eye, Skin, & Upper Respiratory Tract irritation
POTASSIUM DEUTEROXIDE (D, 97-99%) (3	0-40% IN D2O)
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	>= mg/kg bodyweight/day
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	: Safety glasses. Gloves. Protective clothing. Respiratory protection of the dependent type. Avoid all unnecessary exposure.
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	<ul> <li>Wear suitable protective clothing.</li> <li>In case of inadequate ventilation wear respiratory protection.</li> </ul>
Respiratory protection	. הו כמשב טו וומטבעטמוב עבוווומווטון שלמו ופשטומוטוץ טוטופטוטוו.
20/10/2017	EN (English) 4/10

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Environmental exposure controls	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Other information	: Do not eat, drink or smoke during use.

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	
The properties listed below are for the solvent, the main comp	
Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 20.03 g/mol (Labeled)
Colour	: Colourless.
Odour	: odourless.
Odour threshold	: No data available
рН	: > 14 at 20 °C (68 °F)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: <-20 °C (<-4 °F)
Freezing point	: No data available
Boiling point	: 136 °C (277 °F) at 1,013 hpa
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: Distillable in an undecomposed state at normal pressure.
Flammability (solid, gas)	: Non flammable
Vapour pressure	: 3 hPa at 20 °C (68 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.45 g/ml at 20 °C (68 °F)
Solubility	: Water: Soluble at 20 °C (68 °F)
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 5 mPa.s at 20 °C (68 °F)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	

No additional information available

<b>SECTION 10: Stability and reactivi</b>	ty		
10.1. Reactivity			
Not available.			
10.2. Chemical stability			
Stable if stored under recommended condition	ns.		
10.3. Possibility of hazardous reaction	S		
Not established.			
10.4. Conditions to avoid			
Not available. Direct sunlight. Extremely high or low temperatures.			
10.5. Incompatible materials			
No data available. Strong acids. Strong bases.			
10.6. Hazardous decomposition produ	6. Hazardous decomposition products		
No data available. fume. Carbon monoxide. Carbon dioxide.			
<b>SECTION 11: Toxicological inform</b>	ation		
11.1. Information on toxicological effect	ts		
Acute toxicity	: Oral: Harmful if swallowed.		
POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)			
LD50 oral rat	> 90000 mg/kg		
ATE CLP (oral)	1250.000 mg/kg bodyweight		

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DEUTERIUM OXIDE (D, 99.9%) (7789-20-0)		
LD50 oral rat	> 90000 mg/kg	
POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)		
ATE CLP (oral)	500.000 mg/kg bodyweight	
ATE CLP (dust,mist)	0.500 mg/l/4h	
Skin corrosion/irritation	: Causes severe skin burns and eye damage.	
	No data available Causes skin irritation	
	pH: > 14 at 20 °C (68 °F)	
Serious eye damage/irritation	: Causes serious eye damage.	
	No data available	
	pH: > 14 at 20 °C (68 °F)	
Respiratory or skin sensitisation	: Not available	
	No data available	
Germ cell mutagenicity	: Not available	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not available	
STOT-single exposure	: Not classified	
	May cause respiratory irritation	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Potential adverse human health effects and symptoms	: The chemical, physical, and toxicological properties have not been thoroughly investigated. Based on available data, the classification criteria are not met.	
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation. May cause respiratory irritation.	
Symptoms/injuries after skin contact	: Causes severe skin burns.	
Symptoms/injuries after eye contact	: Causes serious eye damage.	
Symptoms/injuries after ingestion	: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.	

# **SECTION 12: Ecological information**

### 12.1. Toxicity

No additional information available

12.2. Persistence and degradability		
POTASSIUM DEUTEROXIDE (D, 97-99%) (30-4	10% IN D2O)	
Persistence and degradability	Not available. Not established.	
POTASSIUM DEUTEROXIDE (D, 97-99%) (2457	/2-01-8)	
Persistence and degradability	Not available.	
12.3. Bioaccumulative potential		
POTASSIUM DEUTEROXIDE (D, 97-99%) (30-4	10% IN D2O)	
Bioaccumulative potential	Not available. Not established.	
POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)		
Bioaccumulative potential	Not available.	
12.4. Mobility in soil		
POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)		
Ecology - soil	Not available.	
POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)		
Ecology - soil	Not available.	
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		
Other adverse effects :	Not available.	
Other information :	Avoid release to the environment.	

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

26, 2012 / Rules and Regulations	
SECTION 13: Disposal consideratio	ns
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Product/Packaging disposal recommendations:	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
<b>SECTION 14: Transport information</b>	
In accordance with ADR / RID / IMDG / IATA / A	DN
14.1. UN number	
UN-No.(DOT)	: 1814
DOT NA no.	UN1814
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	: Potassium hydroxide, solution
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT)	: 8 - Corrosive
	N.F. The
	CORROSIVE
	8
Packing group (DOT)	: II - Medium Danger
DOT Special Provisions (49 CFR 172.102)	: B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are
	not authorized.
	IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite
	(31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110
	kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal
	TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the
	following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the
	temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and
	the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For
	liquids transported under ambient conditions may be calculated using the formula: (image)
	Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C
DOT Deckering Exceptions (40 CED 472 yms)	(59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
Marine pollutant	: No
14.3. Additional information	
Emergency Response Guide (ERG) Number	: 154
Other information	: No supplementary information available.
Special transport precautions	· · · · · · · · · · · · · · · · · · ·
Overland transport	
Packing group (ADR)	: II
Class (ADR)	: 8 - Corrosive substances
Hazard identification number (Kemler No.)	: 80
Classification code (ADR)	: C5
Danger labels (ADR)	: 8 - Corrosive substances
	A



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Orange plates	•	80 1814
Tunnel restriction code (ADR)	:	E
Limited quantities (ADR)		1
EAC code	:	2R
Excepted quantities (ADR)	:	E2
Transport by sea		
DOT Vessel Stowage Location	:	A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	52 - Stow "separated from" acids
MFAG-No	:	154
Air transport		
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
Civil Aeronautics Law	:	Corrosive substances(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

14.4.	Environmental hazards	
Other in	formation	: No supplementary information available.
14.5.	Special precautions for user	
Special transport precautions :		

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information		
15.1. US Federal regulations		
POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313	
POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)		
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313	

## **15.2. International regulations**

# CANADA

POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)
Listed on the Canadian DSL (Domestic Substances List)

# 15.2.1. National regulations

No additional information available

# 15.3. US State regulations

POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)()		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental	No	
Toxicity		

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

POTASSIUM DEUTEROXIDE (D, 97-99%) (30-40% IN D2O)()					
U.S California - Proposition 65 - Reproductive Toxicity - Female		No			
U.S California - Proposition 65 - Reproductive Toxicity - Male		No			
State or local regulations		U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List			
POTASSIUM DEUTEROXII	POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	
No	No	No	No		
POTASSIUM DEUTEROXIDE (D, 97-99%) (24572-01-8)					
State or local regulations					
U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List					

# **SECTION 16: Other information**

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound. None.

# Full text of R-, H- and EUH-statements:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R23	Toxic by inhalation
R23/25	Toxic by inhalation and if swallowed
R35	Causes severe burns
R41	Risk of serious damage to eyes
С	Corrosive
Т	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.
HMIS III Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard
Physical	: 1 Slight Hazard

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product