

IENCES<sup>®</sup> G-Biosciences, St Louis, MO, USA | 1-800-628-7730 | 1-314-991-6034 | technical@GBiosciences.com

A Geno Technology, Inc. (USA) brand name

# **Safety Data Sheet**

Cat. # R008

# Potassium hydroxide solution [2N]

Size: 100ml





Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 5/11/2017 Version: 1.1

SECTION 1: Id	entification of the substa	ance/mixture and of the	company/undertaking		
1.1. Product ide			3		
Product form		: Mixture			
Product name : F		: Potassium Hydroxide (2N)			
Product code		: 309P	: 309P		
Product group : Trade product					
1.2. Relevant ide	entified uses of the substan	ce or mixture and uses ac	lvised against		
1.2.1. Relevant ide No additional inform					
1.2.2. Uses advise No additional inform	nation available				
Geno Technology, 9800 Page Avenue 63132-1429 Saint L T 800-628-7730 - F	ouis - United States				
<b>1.4. Emergency</b> Emergency number	telephone number	Chemtrec <b>1-800-424-9300</b> (US	A/Canada), <b>+1-703-527-3887</b> (	Intl)	
Country	Organisation/Company	Address	Emergency number	Comment	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111		
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111		
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111		
United Kingdom	National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111		
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188		
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0344 892 0111		

## **SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1A Full text of H statements : see section 16 H314

Adverse physicochemical, human health and environmental effects Causes severe skin burns and eye damage.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## 2.2. Label elements

Z.Z. Laber cicilients	
Labelling according to Regulation (EC) No Hazard pictograms (CLP)	. 1272/2008 [CLP]
	GHS05
CLP Signal word	: Danger
Hazard statements (CLP)	: H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	<ul> <li>P260 - Do not breathe dust/fume/gas/mist/vapours/spray.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P310 - Immediately call a POISON CENTER or doctor.</li> <li>P321 - Specific treatment (see supplemental first aid instruction on this label).</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul>
2.3. Other hazards	

### 2.3. Other nazards No additional information available

<b>SECTION 3: Composition/information on</b>	ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Deionized water	(CAS-No.) 7732-18-5	>= 80	Not classified
potassium hydroxide	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8	10 - 50	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
potassium hydroxide	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8	( 0.5 = <c 2)="" 2,="" <="" eye="" h319<br="" irrit.="">( 0.5 =<c 2)="" 2,="" <="" h315<br="" irrit.="" skin="">( 2 =<c 1b,="" 5)="" <="" corr.="" h314<br="" skin="">( 5 =<c 100)="" 1a,="" <="" corr.="" h314<="" skin="" td=""></c></c></c></c>	

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.
4.3. Indication of any immediate medica	al attention and special treatment needed

Treat symptomatically.

# Potassium Hydroxide (2N) Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.		
5.2. Special hazards arising from the substance or mixture			
Reactivity in case of fire	: Thermal decomposition generates : Corrosive vapours.		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Advice for firefighters			
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel			
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.		
6.1.2. For emergency responders			
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			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up	: Take up liquid spill into absorbent material.		
Other information	: Dispose of materials or solid residues at an authorized site.		
6.4. Reference to other sections			
For further information refer to section 13.			

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.		
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
7.2. Conditions for safe storage, including any incompatibilities			
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.		
Storage temperature	: 20 °C		
7.3. Specific end use(s)			

No additional information available

SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
potassium hydroxide (1310-58-3)			
United Kingdom - Occupational Exposure Limits			
WEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>		
8.2. Exposure controls			
Appropriate engineering controls:			
Ensure good ventilation of the work station.			
Hand protection:			
Protective gloves			
Eye protection:			
Safety glasses			
Skin and body protection:			
Wear suitable protective clothing			

## Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# Potassium Hydroxide (2N) Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and c		
Physical state	: Liquid	
Colour	: No data available	
Odour	: No data available	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Not applicable	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: No data available	
Solubility	: No data available	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		

ther information No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
Hazardous decomposition products.

<b>SECTION 11: Toxicological information</b>			
11.1. Information on toxicological effects			
Acute toxicity (oral)	: Not classified		
Acute toxicity (dermal)	: Not classified		
Acute toxicity (inhalation)	: Not classified		
potassium hydroxide (1310-58-3)			
LD50 oral rat	333 mg/kg (Equivalent or similar to OECD 425, Rat, Male, Experimental value, Oral)		
Skin corrosion/irritation	: Causes severe skin burns and eye damage.		
Serious eye damage/irritation	: Serious eye damage, category 1, implicit		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		

# Potassium Hydroxide (2N) Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

	( ) 0	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
potassium hydroxide (1310-58-3)	
LC50 fish 1	80 mg/l (96 h, Gambusia affinis, Static system, Fresh water, Experimental value)
12.2. Persistence and degradability	
potassium hydroxide (1310-58-3)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
potassium hydroxide (1310-58-3)	
Bioaccumulative potential	Bioaccumulation: not applicable.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Waste treatment methods.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / ADN	
14.1. UN number	
UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
14.3 Transport hazard class(es)	

14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport	

. No data available

Transport by sea

## No data available

Air transport

No data available

Inland waterway transport

## No data available

Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

## 15.1.2. National regulations

### No additional information available

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Safety Data Sheet applicable for regions

: GB - United Kingdom

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## SDS EU (REACH Annex II)

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.