

ENCES[®] 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. # 786-819

Potassium hydroxide solution [2N]

Size: 1L





Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/01/2016 Revision date: 05/11/2017 Version: 7.1

| SECTION 1: Identification | |
|--|--|
| 1.1. Identification | |
| Product form | : Mixture |
| Product name | : Potassium Hydroxide (2N) |
| Product code | : 309P |
| 1.2. Recommended use and restrictions | s on use |
| No additional information available | |
| 1.3. Supplier | |
| Geno Technology, Inc./ G-Biosciences 9800 Page Avenue Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504 technical@GBiosciences.com - www.GBioscience | <u>ces.com</u> |
| 1.4. Emergency telephone number | |
| Emergency number | : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl) |
| SECTION 2: Hazard(s) identification | |
| 2.1. Classification of the substance or m | nixture |
| | |
| GHS US classification Skin corrosion/irritation Category 1A H314 Ca | ausas savara skin hurns and eve damage |
| Full text of H statements : see section 16 | auses severe skin burns and eye damage |
| | |
| 2.2. GHS Label elements, including prec | cautionary statements |
| GHS US labeling | |
| | |
| Signal word (GHS US) | : Danger |
| Hazard statements (GHS US) | : H314 - Causes severe skin burns and eye damage |
| Precautionary statements (GHS US) | P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. 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 poison center or doctor P321 - Specific treatment (see supplemental first aid instruction on this label) P363 - Wash contaminated clothing before reuse. P405 - Store locked up. 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 which do not result in | n classification |
| No additional information available | |
| 2.4. Unknown acute toxicity (GHS US) | |
| Not applicable | |
| SECTION 3: Composition/Informatio | on on ingredients |
| | |
| 3.1. Substances | |
| 3.1. Substances Not applicable Image: Comparison of the second | |

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| Name | Common Name (Synonyms) | Product identifier | % | GHS US classification |
|---------------------|---|---------------------|---------|--|
| potassium hydroxide | B752 / caustic potash / caustic potash dry / caustic potash, dry solid, flake, bead or granular / caustic potash, solid / caustic potash,solid / hydrate of potash / hydrate of potassium / hydroxide of potash / hydroxide of potassium / lye (=potassium hydroxide) / potash / potash hydrate / potash lye / potassium hydroxide / potassium hydroxide (K(OH)) / potassium hydroxide dry / potassium hydroxide, dry solid, flake, bead or granular / potassium hydroxide, electrolytical, solid / potassium | (CAS-No.) 1310-58-3 | 10 - 50 | Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 |

Full text of hazard classes and 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. Remove/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 eff | ects (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. Immediate medical attention and s | special treatment, if necessary |
| Treat symptomatically. | |
| SECTION 5: Fire-fighting measures | |
| 5.1. Suitable (and unsuitable) extingui | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| 5.2. Specific hazards arising from the | chemical |
| Reactivity in case of fire | : Thermal decomposition generates : Corrosive vapors. |
| 5.3. Special protective equipment and | precautions for fire-fighters |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| SECTION 6: Accidental release me | asures |
| 6.1. Personal precautions, protective e | 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/vapors/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. | |
| | nent and cleaning up |
| Avoid release to the environment. 6.3. Methods and material for container Methods for cleaning up | nent and cleaning up : Take up liquid spill into absorbent material. |
| 6.3. Methods and material for contain | |

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| 6.4. Reference to other sections | |
|--|---|
| For further information refer to section 13. | |
| SECTION 7: Handling and stora | ige |
| 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/vapors/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, in | ncluding any incompatibilities |
| Storage conditions | : Store locked up. Store in a well-ventilated place. Keep cool. |
| Storage temperature | : 20 °C |
| | |

| SECTION 8: Exposure controls/personal protection | | |
|--|---------------------|--|
| 8.1. Control parameters | | |
| Potassium Hydroxide (2N) | | |
| No additional information available | | |
| potassium hydroxide (1310-58-3) | | |
| USA - ACGIH - Occupational Exposure Limits | | |
| ACGIH Ceiling (mg/m ³) | 2 mg/m ³ | |

| 8.2. Appropriate engineering contro | ls |
|-------------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |

Environmental exposure controls

: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

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

| SECTION 9: Physical and chemical properties | | |
|---|---------------------|-----|
| 9.1. Information on basic physical and o | chemical properties | |
| Physical state | : Liquid | |
| Color | : No data available | |
| Odor | : No data available | |
| Odor threshold | : No data available | |
| рН | : No data available | |
| Melting point | : Not applicable | |
| Freezing point | : No data available | |
| Boiling point | : No data available | |
| Flash point | : No data available | |
| Relative evaporation rate (butyl acetate=1) | : No data available | |
| Flammability (solid, gas) | : Not applicable. | |
| Vapor pressure | : No data available | |
| Relative vapor density at 20 °C | : No data available | |
| Relative density | : No data available | |
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| Solubility | : No data available |
|---------------------------|---------------------|
| Log Pow | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| | |

9.2. Other information

| 9.2. Other information | |
|--|---|
| No additional information available | |
| SECTION 10: Stability and reactivity | |
| 10.1. Reactivity | |
| The product is non-reactive under normal condition | ions 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 co | nditions of use. |
| 10.4. Conditions to avoid | |
| None under recommended storage and handling | g conditions (see section 7). |
| 10.5. Incompatible materials | |
| No additional information available | |
| 10.6. Hazardous decomposition products | s de la constante d |
| Hazardous decomposition products. | |
| SECTION 11: Toxicological informat | ion |
| 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) |
| ATE US (oral) | 500 mg/kg body weight |
| Skin corrosion/irritation | : Causes severe skin burns and eye damage. |
| Serious eye damage/irritation | : Eye damage, category 1, implicit |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity - single exposure | : Not classified |
| Specific target organ toxicity – repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| Symptoms/effects after skin contact | : Burns. |
| Symptoms/effects after eye contact | : Serious damage to eyes. |
| Symptoms/effects after ingestion | : Burns. |
| | |

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|---|---|
| SECTION 12: Ecological information | |
| 12.1. Toxicity | |
| Ecology - general | : Before neutralisation, the product may represent a danger to aquatic organisms. |
| 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) | Die de werde bilten wet een lies ble |
| Persistence and degradability Chemical oxygen demand (COD) | Biodegradability: not applicable. Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |
| 12.3. Bioaccumulative potential | |
| | |
| potassium hydroxide (1310-58-3) | Disconumulations not applicable |
| Bioaccumulative potential | Bioaccumulation: not applicable. |
| 12.4. Mobility in soil | |
| No additional information available | |
| 12.5. Other adverse effects | |
| No additional information available | |
| | |
| | |
| SECTION 13: Disposal consideration | |
| 13.1. Disposal methods | |
| Waste treatment methods | : Waste treatment methods. |
| waste treatment methods | |
| SECTION 14: Transport information | |
| Department of Transportation (DOT) | |
| In accordance with DOT | |
| | |
| Other information | : No supplementary information available. |
| Transportation of Dangerous Goods | |
| | |
| Transport by sea | |
| | |
| Air transport | |
| | |
| SECTION 15: Regulatory information | |
| 15.1. US Federal regulations | |
| potassium hydroxide (1310-58-3) | |
| Not listed on the United States TSCA (Toxic Su | ubstances Control Act) inventory |
| Not subject to reporting requirements of the Un | |
| CERCLA RQ | 1000 lb |
| | |
| 15.2. International regulations | |
| 0411454 | |
| CANADA | |
| EU-Regulations | |

EU-Regulations

National regulations No additional information available

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15.3. US State regulations

SECTION 16: Other information

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| Revision date | : | 05/11/2017 |
|---------------|---|------------|
|---------------|---|------------|

Full text of H-phrases:

| H302 | Harmful if swallowed |
|------|---|
| H314 | Causes severe skin burns and eye damage |

SDS US (GHS HazCom 2012)

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.