

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. # 786-1224

ECH-Agarose

Size: 50 ml





Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 03/06/2017 Revision date: 05/11/2017 Version: 7.1

| SECTION 1: Identification | |
|---|---|
| 1.1. Identification | |
| Product form | : Mixture |
| Product name | : ECH-Agarose |
| Product code | : 045E |
| 1.2. Recommended use and restrictio | ns 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.GBioscie | ences.com |
| 1.4. Emergency telephone number | |
| Emergency number | : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl) |
| SECTION 2: Hazard(s) identification | n |
| 2.1. Classification of the substance of | r mixture |
| GHS US classification | |
| Flammable liquids Category 4 | H227 Combustible liquid |
| Serious eye damage/eye irritation Category 2 | H319 Causes serious eye irritation |
| Full text of H statements : see section 16 | |
| 2.2. GHS Label elements, including pr | recautionary statements |
| GHS US labeling | |
| Hazard pictograms (GHS US) | |
| Signal word (GHS US) | : Warning |
| Hazard statements (GHS US) | : H227 - Combustible liquid |
| | H319 - Causes serious eye irritation |
| Precautionary statements (GHS US) | P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. 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 resul | t in classification |
| No additional information available | |
| 2.4. Unknown acute toxicity (GHS US) | |
| Not applicable | |
| SECTION 3: Composition/Informat | ion on ingredients |
| 3.1. Substances | |
| Not applicable | |
| 3.2. Mixtures | |
| Vizi Militures | |

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Name | Common Name (Synonyms) | Product identifier | % | GHS US classification |
|------------|---|--------------------|---------|---|
| 2-propanol | 1-methylethanol / 1-methylethyl alcohol / 2-hydroxypropane / 2- propanol / 2-propanol,anhydrous / 2-propyl alcohol / Al3-01636 / alcojel / alcosolve / AVANTIN / AVANTINE / caswell No 507 / chromar (=2-propanol) / combi- schutz / CORONA WIRE CLEANER (=2-propanol) / CTL R- 53 reducer / dimethyl carbinol / DISK DRIVE HEAD CLEANING KIT (=2-propanol) / ethyl carbinol / hartosol / hydroxypropane / imsol A / IPA SGL / IPA T1 / IPA USP / IPA, anhydrous / IPA-EG / isoethylcarbinol / isophol / alcohol / isopropyl alcohol, anhydrous / KENCO #880-T FLUX THINNER (=2-propanol) / LENS CLENS #3 (=2-propanol) / LENS CLENS #3 (=2-propanol) / lutosol / normal-propan-2-ol / n-propan-2-ol / perspirit / perspit / petrohol / PRO / productode S1155 / propan-2-ol / propyl alcohol (=sec- propyl alcohol) / sec-propyl alcohol / sec-propanol / Sec-propyl alcohol | (CAS-No.) 67-63-0 | 10 - 50 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 |

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 after inhalation | : Remove person to fresh air and keep comfortable for breathing. | |
| First-aid measures after skin contact | : Wash skin with plenty of water. | |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. | |
| First-aid measures after ingestion | : Call a poison center/doctor/physician if you feel unwell. | |
| 4.2. Most important symptoms and effe | ects (acute and delayed) | |
| Symptoms/effects after eye contact | : Eye irritation. | |
| 4.3. Immediate medical attention and s Treat symptomatically. | pecial treatment, if necessary | |
| SECTION 5: Fire-fighting measures | | |
| 5.1. Suitable (and unsuitable) extinguis | shing media | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. | |
| 5.2. Specific hazards arising from the o | chemical | |
| Fire hazard | : Combustible liquid. | |
| 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 mea | 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. No open flames, no sparks, and no smoking. | |
| 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". | |
| 06/28/2019 | EN (English US) 2/6 | |

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| 6.2. Environmental precau | itions | | |
|--------------------------------------|--|--|--|
| Avoid release to the environment. | | | |
| 6.3. Methods and material | Methods and material for containment and cleaning up | | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. | | |
| Other information | : Dispose of materials or solid residues at an authorized site. | | |
| 6.4. Reference to other se | ctions | | |
| For further information refer to see | ction 13. | | |
| SECTION 7: Handling and | d storage | | |
| 7.1. Precautions for safe h | andling | | |
| Precautions for safe handling | Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contac with skin and eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. | | |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | | |
| 7.2. Conditions for safe st | orage, including any incompatibilities | | |
| Storage conditions | : Store in a well-ventilated place. Keep cool. | | |
| - | | | |
| SECTION 8: Exposure co | ntrols/personal protection | | |
| 8.1. Control parameters | | | |
| ECH-Agarose | | | |
| No additional information availab | | | |

| No additional information available | |
|--|---------|
| 2-propanol (67-63-0) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH TWA (ppm) | 200 ppm |
| ACGIH STEL (ppm) | 400 ppm |

| 8.2. | Appropriate engineering controls | |
|--------|----------------------------------|--|
| Approp | riate 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 | l chemical properties | |
|---------------------------|----------------------------------|-----|
| 9.1. Information on basic | physical and chemical properties | |
| Physical state | : Liquid | |
| Color | : No data available | |
| Ddor | : No data available | |
| Ddor threshold | : No data available | |
| н | : No data available | |
| lelting point | : Not applicable | |
| Freezing point | : No data available | |
| 06/28/2019 | EN (English US) | 3/6 |

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Boiling point | : No data available |
|---|---------------------|
| Flash point | : 65 °C |
| 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 |
| 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**

| No additional information available | |
|--|--|
| SECTION 10: Stability and reactivity | |
| 10.1. Reactivity | |
| The product is non-reactive under normal condition | ns 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 con | ditions of use. |
| 10.4. Conditions to avoid | |
| Avoid contact with hot surfaces. Heat. No flames, | no sparks. Eliminate all sources of ignition. |
| 10.5. Incompatible materials | |
| No additional information available | |
| 10.6. Hazardous decomposition products | |
| Hazardous decomposition products. | |
| SECTION 11: Toxicological information | on |
| 11.1. Information on toxicological effects | |
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| 2-propanol (67-63-0) | |
| LD50 oral rat | 5840 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | 16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s)) |
| LC50 inhalation rat (ppm) | > 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| ATE US (oral) | 5840 mg/kg body weight |
| ATE US (dermal) | 16400000 mg/kg body weight |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |

Carcinogenicity

: Not classified

ECH-Agarose Safety Data Sheet

| reproductive toxicity | : Not classified |
|--|--|
| Specific target organ toxicity – single exposure | : Not classified |
| 2-propanol (67-63-0) | |
| Specific target organ toxicity - single exposure | May cause drowsiness or dizziness. |
| Specific target organ toxicity – repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| /iscosity, kinematic | : No data available |
| Symptoms/effects after eye contact | : Eye irritation. |
| SECTION 12: Ecological information | |
| 12.1. Toxicity | |
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
| 2-propanol (67-63-0) | |
| LC50 fish 1 | 9640 - 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow- through system, Fresh water, Experimental value, Lethal) |
| 12.2. Persistence and degradability | |
| 2-propanol (67-63-0) | |
| F - F | |
| Persistence and degradability | Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water. |
| Persistence and degradability Biochemical oxygen demand (BOD) | biodegradable in water. 1.19 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) | biodegradable in water. 1.19 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential 2-propanol (67-63-0) | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance 2.4 g O ₂ /g substance |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential 2-propanol (67-63-0) Log Pow Bioaccumulative potential | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance 2.4 g O ₂ /g substance 0.05 (Weight of evidence approach, 25 °C) |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential 2-propanol (67-63-0) Log Pow Bioaccumulative potential | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance 2.4 g O ₂ /g substance 0.05 (Weight of evidence approach, 25 °C) |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential 2-propanol (67-63-0) Log Pow Bioaccumulative potential 12.4. Mobility in soil 2-propanol (67-63-0) Surface tension | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance 2.4 g O ₂ /g substance 0.05 (Weight of evidence approach, 25 °C) Low potential for bioaccumulation (Log Kow < 4). 0.021 N/m (25 °C) |
| Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 12.3. Bioaccumulative potential 2-propanol (67-63-0) Log Pow Bioaccumulative potential 12.4. Mobility in soil 2-propanol (67-63-0) | biodegradable in water. 1.19 g O ₂ /g substance 2.23 g O ₂ /g substance 2.4 g O ₂ /g substance 0.05 (Weight of evidence approach, 25 °C) Low potential for bioaccumulation (Log Kow < 4). |

| SECTION 13: Disposal conside | rations | |
|--|----------------------------|--|
| 13.1. Disposal methods | | |
| Waste treatment methods | : Waste treatment methods. | |
| SECTION 14: Transport inform Department of Transportation (DOT) In accordance with DOT | ation | |

Not applicable

Transportation of Dangerous Goods

Not applicable

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transport by sea

Not applicable

Air transport

Not applicable

| SECTION 15: Regulatory information | |
|--|--|
| 15.1. US Federal regulations | |
| 2-propanol (67-63-0) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313 | |

15.2. International regulations

CANADA

| 2-propanol (67-63-0) | |
|---|--|
| Listed on the Canadian DSL (Domestic Substances List) | |
| EU-Regulations | |

National regulations

No additional information available

15.3. US State regulations

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date

: 05/11/2017

Full text of H-phrases:

| H225 | Highly flammable liquid and vapour |
|------|------------------------------------|
| H227 | Combustible liquid |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |

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.