

IENCES® 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. # 786-714

Glutathione Resin, 0.2ml Spin Column

Size: 25 columns





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: Identification of the substa	nco/mixturo and of the compa	ny/undortakir	a
1.1. Product identifier	nce/mixture and of the compa	iny/undertakii	19
Product form	: Mixture		
Product name	: Glutathione Resin		
Product code	: 109G_110G_111G_112G_113G		
Product group	: Blend		
1.2. Relevant identified uses of the substan		gainst	
1.2.1. Relevant identified uses			
No additional information available			
1.2.2. Uses advised against			
No additional information available			
1.3. Details of the supplier of the safety data Geno Technology, Inc./ G-Biosciences	a sheet		
9800 Page Avenue			
53132-1429 Saint Louis - United States			
T 800-628-7730 - F 314-991-1504 technical@GBiosciences.com - www.GBiosciences.c	20m		
	<u>5011</u>		
1.4. Emergency telephone number Emergency number : (Chemtrec 1-800-424-9300 (USA/Canada	a). +1-703-527-38	87 (Intl)
SECTION 2: Hazards identification			
2.1. Classification of the substance or mixtu	Ire		
Classification according to Regulation (EC) No. 1			
Adverse physicochemical, human health and env To our knowledge, this product does not present any practice.		accordance with g	ood occupational hygiene and safe
2.2. Label elements			
Labelling according to Regulation (EC) No. 1272/	2008 [CLP]		
No labelling applicable 2.3. Other hazards			
No additional information available			
SECTION 3: Composition/information o	n ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name	Product identifier	%	Classification according to
Name	Froduct identifier	70	Regulation (EC) No. 1272/2008 [CLP]
ethanol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	> 50	Flam. Liq. 2, H225
agarose	(CAS-No.) 9012-36-6 (EC-No.) 232-731-8	50 - 80	Not classified
Deionized water	(CAS-No.) 7732-18-5	10 - 50	Not classified
Full text of H-statements: see section 16		I	

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 eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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4.2. Most important symptoms and effects, both acute and delayed	
No additional information available	
4.3. Indication of any immediate medical attention and special treatment needed	

Treat symptomatically. 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 substa	ance or mixture
Fire hazard	: Combustible liquid.
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 equip	ment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. 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".	
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. 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 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. Wear personal protective equipment. 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 storage, including a	ny incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
Storage temperature	: 4 °C
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection		
8.1. Control parameters		
ethanol (64-17-5)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (mg/m³)	1920 mg/m³	
WEL TWA (ppm)	1000 ppm	
8.2. Exposure controls		
Appropriate engineering controls:		
Ensure good ventilation of the work station.		
Hand protection:		
Protective gloves		

Protective gloves Eye protection: Safety glasses

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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties : Liquid Physical state Colour : No data available Odour : No data available Odour threshold : No data available pН : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available : No data available Boiling point : 65 °C Flash point Auto-ignition temperature : No data available

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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

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
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	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)

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> 20 mg/l (4 h, Rat, Inhalation)
: Not classified
1 - Carcinogenic to humans
: Not classified
: Not classified
: Not classified
: Not classified

1	: Not classified

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general :	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity :	Not classified
Chronic aquatic toxicity :	Not classified
ethanol (64-17-5)	
LC50 fish 1	14200 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	9300 mg/l (48 h, Daphnia magna, Pure substance)
EC50 72h algae (1)	275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)
12.2. Persistence and degradability	
ethanol (64-17-5)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O_2 /g substance
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
BOD (% of ThOD)	0.43

agarose (9012-36-6)	
Persistence and degradability	Biodegradability in water: no data available.
12.3. Bioaccumulative potential	
ethanol (64-17-5)	
BCF fish 1	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Log Pow	-0.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 24 $^\circ\text{C}$)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

agarose (9012-36-6)		
Bioaccumulative potential	No bioaccumulation data available.	
12.4. Mobility in soil		
ethanol (64-17-5)		
Surface tension	0.0245 N/m (20 °C)	
Ecology - soil	Highly mobile in soil.	

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agarose (9012-36-6)	
Ecology - soil	No (test)data on mobility of the substance available.
12.5. Results of PBT and vPvB assessment	
Component	
ethanol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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 regulated
UN-No. (IATA)	: Not regulated
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 regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not applicable
14.3. Transport hazard class(es) ADR	
Transport hazard class(es) (ADR)	: Not applicable
	. Niet zo zvileto d
Transport hazard class(es) (IMDG)	: Not regulated
Transport hazard class(es) (IATA)	: Not regulated
ADN	
Transport hazard class(es) (ADN)	: Not applicable
RID	
Transport hazard class(es) (RID)	: Not applicable
14.4. Packing group	
Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
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	
Not regulated	
Air transport	

Not regulated

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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:	
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
Safety Data Sheet applicable for regions : GB - United Kingdom	

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.