

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. # 786-957

## G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow

Size: 25ml





## G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow

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

	: Mixture		
Product name	: G-Sep™ Butyl Agarose 6 Fast F	low	
Product code	: 304G		
roduct group	: Trade product		
.2. Relevant identified uses of th	e substance or mixture and uses advise	d against	
.2.1. Relevant identified uses lo additional information available			
.2.2. Uses advised against			
lo additional information available .3. Details of the supplier of the	safatu data shoot		
Geno Technology, Inc./ G-Biosciences 800 Page Avenue 3132-1429 Saint Louis - United States			
800-628-7730 - F 314-991-1504 echnical@GBiosciences.com - www.GE	Biosciences.com		
.4. Emergency telephone number	r : Chemtrec <b>1-800-424-9300</b> (USA/Ca	nada), <b>+1-703-527-</b> 3	3887 (Intl)
ECTION 2: Hazards identification	ition		
.1. Classification of the substand			
lassification according to Regulation	n (EC) No. 1272/2008 [CLP]		
ot classified			
dverse physicochemical, human here o our knowledge, this product does not	alth and environmental effects present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
lot classified Adverse physicochemical, human her To our knowledge, this product does not ractice. 2.2. Label elements		d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>2.2. Label elements</b> abelling according to Regulation (EC lo labelling applicable	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>2. Label elements</b> <b>abelling according to Regulation (EC</b> Io labelling applicable <b>3. Other hazards</b>	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
dverse physicochemical, human here o our knowledge, this product does not ractice. .2. Label elements abelling according to Regulation (EC lo labelling applicable .3. Other hazards	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>3.2. Label elements</b> <b>abelling according to Regulation (EC</b> Io labelling applicable <b>3.3. Other hazards</b> Io additional information available	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>2. Label elements</b> <b>abelling according to Regulation (EC</b> Io labelling applicable <b>3. Other hazards</b> Io additional information available <b>SECTION 3: Composition/info</b> <b>3.1. Substances</b>	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>2. Label elements</b> <b>abelling according to Regulation (EC</b> Io labelling applicable <b>3. Other hazards</b> Io additional information available <b>SECTION 3: Composition/info</b> <b>.1. Substances</b> Iot applicable	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>.2. Label elements</b> <b>abelling according to Regulation (EC</b> to labelling applicable <b>.3. Other hazards</b> to additional information available <b>ECTION 3: Composition/info .1. Substances</b> tot applicable	present any particular risk, provided it is handle		n good occupational hygiene and s
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>2. Label elements</b> <b>abelling according to Regulation (EC</b> Io labelling applicable <b>3. Other hazards</b> Io additional information available <b>SECTION 3: Composition/info</b>	present any particular risk, provided it is handle	d in accordance with	n good occupational hygiene and so Classification according Regulation (EC) No. 1272/2008 [CLP]
dverse physicochemical, human here o our knowledge, this product does not ractice. .2. Label elements abelling according to Regulation (EC to labelling applicable .3. Other hazards to additional information available SECTION 3: Composition/info .1. Substances tot applicable .2. Mixtures	present any particular risk, provided it is handle		Classification according Regulation (EC) No.
dverse physicochemical, human here o our knowledge, this product does not ractice. .2. Label elements abelling according to Regulation (EC o labelling applicable .3. Other hazards to additional information available ECTION 3: Composition/info .1. Substances tot applicable .2. Mixtures Name	present any particular risk, provided it is handle C) No. 1272/2008 [CLP]  rmation on ingredients  Product identifier  (CAS-No.) 9012-36-6	%	Classification according Regulation (EC) No. 1272/2008 [CLP]
Adverse physicochemical, human here to our knowledge, this product does not ractice. <b>.2. Label elements</b> <b>abelling according to Regulation (EC</b> to labelling applicable <b>.3. Other hazards</b> to additional information available <b>SECTION 3: Composition/info</b> <b>.1. Substances</b> tot applicable <b>.2. Mixtures</b> Name	present any particular risk, provided it is handle C) No. 1272/2008 [CLP]  rmation on ingredients  Product identifier  (CAS-No.) 9012-36-6 (EC-No.) 232-731-8	<mark>%</mark> 50 - 80	Classification according Regulation (EC) No. 1272/2008 [CLP] Not classified
dverse physicochemical, human here o our knowledge, this product does not ractice. <b>.2. Label elements</b> <b>abelling according to Regulation (EC</b> to labelling applicable <b>.3. Other hazards</b> to additional information available <b>SECTION 3: Composition/info</b> <b>.1. Substances</b> tot applicable <b>.2. Mixtures</b> Name Agarose Deionized water	present any particular risk, provided it is handle         C) No. 1272/2008 [CLP]         rmation on ingredients         Product identifier         (CAS-No.) 9012-36-6 (EC-No.) 232-731-8         (CAS-No.) 9012-36-6 (EC-No.) 232-731-8         (CAS-No.) 9012-36-6 (EC-No.) 232-731-8         (CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	%           50 - 80           10 - 50	Classification according Regulation (EC) No. 1272/2008 [CLP] Not classified Not classified

5/11/2017

First-aid measures after skin contact

: Rinse eyes with water as a precaution.

: Call a poison center or a doctor if you feel unwell.

: Wash skin with plenty of water.

# G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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	nce 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 equipment and emergency procedures		
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking.	
	. Ventilate spillage area. No open liames, 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 an	d 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.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal p	protection	
8.1. Control parameters		
ethanol (64-17-5)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (mg/m <sup>3</sup> )	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		
Eye protection:		
Safety glasses		
Skin and body protection:		
Wear suitable protective clothing		
5/11/2017	EN (English)	2/6

## G-Sep™ Butyl Agarose 6 Fast Flow

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

### **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 ch	nemical properties	
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	: 65 °C	
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		

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.

<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
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)
LC50 inhalation rat (mg/l)	> 20 mg/l (4 h, Rat, Inhalation)
Skin corrosion/irritation	: Not classified

## G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

5 5 ( )	, 6 ( ,	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
ethanol (64-17-5)		
IARC group	1 - Carcinogenic to humans	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: 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 <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.7 g O <sub>2</sub> /g substance
ThOD	2.1 g O <sub>2</sub> /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.	

agarose (9012-36-6)	
Ecology - soil	No (test)data on mobility of the substance available.

## G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830		
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 applicable	
UN-No. (IATA)	: Not applicable	
UN-No. (ADN)	: Not applicable	
UN-No. (RID)	: Not applicable	
14.2. UN proper shipping name	Net eveliethe	
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) ADR		
Transport hazard class(es) (ADR)	: Not applicable	
IMDG		
Transport hazard class(es) (IMDG)	: Not applicable	
IATA		
Transport hazard class(es) (IATA)	: Not applicable	
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 applicable	
Packing group (IATA)	: Not applicable	

Packing group (ADN)

Packing group (RID)

Marine pollutant

Other information

**Overland transport** Not applicable

14.5. Environmental hazards Dangerous for the environment

14.6. Special precautions for user

Inland waterway transport

Not applicable

Rail transport

Not applicable

: No supplementary information available

: Not applicable

: Not applicable

: No

: No

## G-Sep<sup>™</sup> Butyl Agarose 6 Fast Flow

Safety Data Sheet

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

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.