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A Geno Technology, Inc. (USA) brand name

# **Safety Data Sheet**

Cat. # 786-958

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

Size: 200ml





Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 12/06/2016 Revision date: 05/11/2017 Version: 7.1

SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: G-Sep™ Butyl Agarose 6	6 Fast Flow		
Product code	: 304G			
1.2. Recommended use and restric	ctions 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.GBio	osciences.com			
1.4. Emergency telephone number	•			
Emergency number	: Chemtrec 1-800-424-930	00 (USA/Canada), +1-70	3-527-3887 (I	Intl)
	dia			
SECTION 2: Hazard(s) identifica 2.1. Classification of the substance				
GHS US classification	and a settle la star stat			
Flammable liquids Category 4 H227 Co	DITIDUSTIDIE IIQUID			
Full text of H statements : see section 16				
2.2. GHS Label elements, including	g precautionary statements			
GHS US labeling				
Signal word (GHS US)	: Warning			
Hazard statements (GHS US)	: H227 - Combustible liqui	d		
Precautionary statements (GHS US)	: P210 - Keep away from I	heat, hot surfaces, spark	s, open flame	es and other ignition sources. No
	smoking.	ulau vaa (avasta atii va alathiin a	./	
	P280 - Wear protective g P370+P378 - In case of t			
	P403+P235 - Store in a v	well-ventilated place. Kee	ep cool.	-
	P501 - Dispose of conter accordance with local, re			
	,	gional, national and/or in		guiation
2.3. Other hazards which do not re	esult in classification			
No additional information available				
2.4. Unknown acute toxicity (GHS	05)			
Not applicable				
SECTION 3: Composition/Inform	nation on ingredients			
3.1. Substances				
Not applicable				
3.2. Mixtures				
Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
ethanol	ethanol (ethyl alcohol) / ethanol, anhydrous, undenatured / ethyl	(CAS-No.) 64-17-5	10 - 50	Flam. Liq. 2, H225
	alcohol			
Full text of hazard classes and H-statemer	nts : see section 16			
SECTION 4: First-aid measures				
4.1. Description of first aid measured	res			
First-aid measures after inhalation		air and keep comfortable	e for breathing	g.
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/doct		inwell.	
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4.2. Most important symptoms and effects	(acute and delayed)		
No additional information available			
4.3. Immediate medical attention and special treatment, if necessary			
Treat symptomatically.			
SECTION 5: Fire-fighting measures			
5.1. Suitable (and unsuitable) extinguishing	a media		
	Water spray. Dry powder. Foam. Carbon dioxide.		
5.2. Specific hazards arising from the chen			
<b>U</b>	Combustible liquid.		
5.3. Special protective equipment and prec	autions for fire-fighters		
	Do not attempt to take action without suitable protective equipment. Self-contained breathing		
	apparatus. Complete protective clothing.		
SECTION 6: Accidental release measu	res		
6.1. Personal precautions, protective equip	oment and emergency procedures		
6.1.1. For non-emergency personnel			
	Ventilate spillage area. No open flames, no sparks, and no smoking.		
6.1.2. For emergency responders			
	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	any incompatibilities		
Storage conditions :	Store in a well-ventilated place. Keep cool.		
SECTION 8: Exposure controls/person	al protection		
8.1. Control parameters			
G-Sep™ Butyl Agarose 6 Fast Flow			
No additional information available			
ethanol (64-17-5)			
USA - ACGIH - Occupational Exposure Limits			
ACGIH STEL (ppm)	1000 ppm		
8.2. Appropriate engineering controls			
Appropriate engineering controls :	Ensure good ventilation of the work station.		
Environmental exposure controls :	Avoid release to the environment.		
8.3. Individual protection measures/Persor	al protective equipment		

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#### 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	: 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 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

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10.6. Hazardous decomposition products	
Hazardous decomposition products.	
SECTION 11: Toxicological informat	ion
11.1. Information on toxicological effects	
	: Not classified
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	
ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg body weight (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
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
ethanol (64-17-5)	
IARC group	1 - Carcinogenic to humans
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
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.
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)
12.2. Persistence and degradability	
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ethanol (64-17-5)	
ethanol (64-17-5) Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.
Persistence and degradability	substance available.
	substance available.       0.8 - 0.967 g O <sub>2</sub> /g substance
Persistence and degradability Biochemical oxygen demand (BOD)	substance available.
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD)	substance available.         0.8 - 0.967 g O <sub>2</sub> /g substance         1.7 g O <sub>2</sub> /g substance
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD BOD (% of ThOD)	substance available.         0.8 - 0.967 g O <sub>2</sub> /g substance         1.7 g O <sub>2</sub> /g substance         2.1 g O <sub>2</sub> /g substance
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD BOD (% of ThOD)	substance available.         0.8 - 0.967 g O <sub>2</sub> /g substance         1.7 g O <sub>2</sub> /g substance         2.1 g O <sub>2</sub> /g substance
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD BOD (% of ThOD) 12.3. Bioaccumulative potential	substance available.         0.8 - 0.967 g O <sub>2</sub> /g substance         1.7 g O <sub>2</sub> /g substance         2.1 g O <sub>2</sub> /g substance
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD BOD (% of ThOD) 12.3. Bioaccumulative potential ethanol (64-17-5)	substance available.         0.8 - 0.967 g O <sub>2</sub> /g substance         1.7 g O <sub>2</sub> /g substance         2.1 g O <sub>2</sub> /g substance         0.43

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ethanol (64-17-5)	
Surface tension	0.0245 N/m (20 °C)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

No additional information available

SECTION 12: Dispassi consideration	
SECTION 13: Disposal consideration 13.1. Disposal methods	ons
Waste treatment methods	: Waste treatment methods.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Not applicable	
Transportation of Dangerous Goods	
Not applicable	
Transport by sea	
Not applicable	
Air transport	
Not applicable	
SECTION 15: Regulatory information	on
SECTION 15: Regulatory information 15.1. US Federal regulations	on
15.1. US Federal regulations ethanol (64-17-5)	
15.1. US Federal regulations	
15.1. US Federal regulations ethanol (64-17-5)	
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations	
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub-	
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations	
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations         CANADA	estances Control Act) inventory
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations         CANADA         ethanol (64-17-5)	estances Control Act) inventory
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Subt         15.2. International regulations         CANADA         ethanol (64-17-5)         Listed on the Canadian DSL (Domestic Subst	estances Control Act) inventory
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations         CANADA         ethanol (64-17-5)         Listed on the Canadian DSL (Domestic Subst         EU-Regulations         National regulations	estances Control Act) inventory
15.1. US Federal regulations         ethanol (64-17-5)         Listed on the United States TSCA (Toxic Sub         15.2. International regulations         CANADA         ethanol (64-17-5)         Listed on the Canadian DSL (Domestic Subst         EU-Regulations	estances Control Act) inventory tances List)
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### **SECTION 16: Other information**

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#### Full text of H-phrases:

H225	Highly flammable liquid and vapour
H227	Combustible liquid

#### 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.