Safety Data Sheet

Protein G Agarose

SDS-10007 Rev. Number: 3 Rev. Date: May 17, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
Protein G Agarose	5720-0003 (223-51-02) 5720-0002 (223-51-01) 5720-0001 (223-51-00)

Hazardous Reagent

PROTEIN G AGAROSE

Hazardous Reagent Product code

Catalog No. listed above

Recommended Use: Reference Reagent

Contact Manufacturer:

SeraCare Life Sciences
910 Clopper Road
Gaithersburg, MD 20878

Phone #: (508) 244-6400
US Toll Free: (800) 676-1881

Fax #: (508) 634-3394

Web: www.seracare.com

Email: customerservice@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone:	13 11 26 - Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone:	(1) 613 996 6666 - Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone:	(44) 029 2041 6388 - Hours: 09:00-17:00 GMT
USA - NATIONAL RESPONSE CENTER	Telephone:	(1) 800 424 8802 - Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number: - CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type Fire Hazard: Flammable

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS Classification Flammable liquids, Category 2; H225

Hazard Statements: H225: Highly flammable liquid and vapor.

Precautionary Statements: P210: Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking.

Symbols and Indications of Danger: GHS02 Dgr: Danger

Principle Route of Exposure: The substance can be absorbed into the body by inhalation of its vapor and by ingestion.

Acute Effects: Eye Redness. Pain. Burning.

Acute Effects: Skin: Dry skin.

Acute Effects: Inhalation: Cough. Headache. Fatigue. Drowsiness.

Inhalation Risk: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

Short-Term Exposure The substance irritates the eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system.

Long-Term Exposure The liquid defats the skin. The substance may have effects on the upper respiratory tract and central nervous system, resulting in irritation, headache, fatigue and lack of concentration. See Notes

Ingestion: Burning sensation. Headache. Confusion. Dizziness. Unconsciousness.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CHEMICAL	% Weight	CAS #:
Protein A Agarose	Ethyl Alcohol	14 - 19%	64-17-5

GHS Classification Flammable liquids, Category 2; H225

4. FIRST AID MEASURES

General Advice: N/A

Oral Exposure: Rinse mouth. Refer for medical attention.

Inhalation Exposure: Fresh air, rest.

Skin Exposure: Remove contaminated clothes. Rinse and then wash skin with water and soap.

Eye Exposure: First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Fire Prevention NO open flames, NO sparks, and NO smoking. NO contact with strong oxidants.

Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling

Extinguishing media: Powder, alcohol-resistant foam, water in large amounts, carbon dioxide.

In case of fire: keep drums, etc., cool by spraying with water.

Unusual Fire and Explosive Hazards:	Reacts slowly with calcium hypochlorite, silver oxide and ammonia, causing fire and explosion hazard. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate or magnesium perchlorate, causing fire and explosion hazard The vapor mixes well with air, explosive mixtures are easily formed.
Flash Point:	N/A
Auto ignition Temperature:	N/A
Flammability Statement:	Highly flammable. Vapor/air mixtures are explosive.
Specific hazards arising from the chemical:	N/A
Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear appropriate personal protective clothing to prevent skin contact. Remove: Work clothing that becomes wet should be immediately removed due to its flammability hazard (i.e. for liquids with flash point < 100°F)
Environmental Precautions:	Not available
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Method of Clean-up	Wash away remainder with plenty of water.
Other Information:	Non-Fire Response Keep sparks, flames, and other sources of ignition away. Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Attempt to stop leak if without undue personnel hazard. Use water spray to knock-down vapor. Land spill: Dig a pit, pond, lagoon, holding area to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash, cement powder, or commercial sorbents. Water spill: Use natural barriers or oil spill control booms to limit spill travel. Remove trapped material with suction hoses. (AAR, 2003)
Spillage / Disposal	Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Wash away remainder with plenty of water. Do not allow materials for disposal to enter sewers where vapors may be ignited.

7. HANDLING AND STORAGE

Handling:	Wear appropriate PPE. See section 8
Storage:	Store at 2-8°C separated from strong oxidants and incompatible substances. Store to reduce likelihood of spillage or rupture

8. EXPOSURE CONTROL

Respiratory Protection:	Ventilation, local exhaust, or breathing protection.
Eye Protection:	Safety goggles.
Skin Protection:	Protective gloves.
Ingestion:	Do not eat, drink, or smoke during work.

Engineering Controls	NIOSH/OSHA Up to 3300 ppm: (APF = 10) Any supplied-air respirator (APF = 50) Any self-contained breathing apparatus with a full facepiece

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White beads in suspension.
Physical State:	Liquid Suspension
Odor:	Alcohol-like
Odor Threshold:	No information available
pH:	Not Applicable
Boiling Point:	79°C
Melting Point	- 117°C
Evaporation Rate:	No information available
Relative Vapor Density:	(air = 1): 1.6
Vapor Pressure:	kPa at 20°C: 5.8
Relative Density:	Relative density (water = 1): 0.8
Auto-Ignition Temperature:	363°C
Water Solubility:	Miscible
Flammability:	Highly flammable liquid or vapor
Flash Point:	13°C c.c.
Octanol/water partition coefficient as log Pow:	- 0.32
Oxidizing Properties:	
Explosive Properties:	Explosive limits, vol% in air: 3.3-19
Additional Parameters	See Datasheet/Product Insert for other Product Information.

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions
Conditions to avoid:	Incompatible materials, ignition sources, excess heat, oxidizers.
Incompatibility Materials to Avoid:	Oxidizing agents, Peroxides, Acids, Acid Chlorides, Acid Anhydrides, Alkali Metals, and Ammonia.
Hazardous Decomposition Products:	Carbon Monoxide, Carbon Dioxide
Hazardous Polymerization:	Will not occur
Possibility of hazardous reactions:	Reacts slowly with calcium hypochlorite, silver oxide and ammonia, causing fire and explosion hazard. Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate or magnesium perchlorate, causing fire and explosion hazard. The vapor mixes well with air, explosive mixtures are easily formed.

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form (100%).

LD50 Oral:	LD50 Mouse oral 3450 mg/kg; LD50 Guinea pig oral 5.6 g/kg
LD50 Dermal:	LD50 Rat iv 1440 mg/kg; LD50 Mouse iv 1973 mg/kg
LC50 Inhalation:	LC50 Mouse inhalation 39 mg/cu m/4 hr; LC50 Rat inhalation 20000 ppm/ 10 hr

Chronic Toxicity

Carcinogenicity:	MAK-COMMISSION - Category 5 (No considerable risk)
Irritation:	An eye and skin irritant
Corrosivity:	Not Available
Sensitization:	Not Available
Neurological Effects:	Not Available
Mutagenic Effects:	MAK COMMISSION Germ Cell Mutagenic- Category 5 (Substance with minimal effect)
Reproductive Effects:	Ethanol consumption during pregnancy may adversely affect the unborn child. MAK COMMISSION - Group C (There is no reason to fear a risk of damage to the developing embryo or fetus when MAK and BAT values are adhered to.)
Developmental Effects:	Not Available
Target Organ Effects:	Eyes, skin, respiratory system, central nervous system, liver, blood, reproductive system
Other adverse effects:	Effects of short-term exposure
	The substance irritates the eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system.
	Effects of long-term or repeated exposure
	The liquid defats the skin. The substance may have effects on the upper respiratory tract and central nervous system, resulting in irritation, headache, fatigue and lack of concentration.

12. ECOLOGICAL MEASURES

Ecotoxicity:	Not harmful. Crustacean (Daphnia magna) EC50 (IMM) 48 hr 9.300 mg/L; NOEC (Reproduction Rate) 9 day 9.6 mg/L (Slightly harmful in the aquatic environment or otherwise designed for biocidal action)
Persistence/Degradability:	Readily biodegradable (74% after 5 days)
Mobility in Environmental Media:	Not available
Bioaccumulation/ Accumulation:	Not likely to bioaccumulate (calculated logBCF=0.5).

13. DISPOSAL MEASURES

Waste Disposal Method:	Observe all Federal, State, and Local laws concerning health and pollution.
Contaminated Packaging:	Dispose of in compliance with the respective national and local regulations
US EPA Waste Number:	Not applicable

14. TRANSPORTATION MEASURES

DOT:	UN-Number: 1170
	UN Hazard Class: 3 (Flammable Liquids)
	UN Pack Group: II (Medium/ low danger)
IATA:	Not Available
ADR (road)/ RID (rail):	Not Available
IMDG (sea):	Not Available
General Transport Regulations	Transport Emergency Card: TEC (R)-30S1170
	NFPA Code: H 0; F 3; R 0

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

REACH (EU) 1907/2006

The product does not include SVHC substance per candidate list

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

This product contains no chemicals listed which are subject to the reporting requirements of the Clean Air Act.

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals	Contains ethyl alcohol – Listed as developmental toxicity (alcoholic beverages only)

State Right to Know Act

Chemical Name:	**Ethyl Alcohol**
Massachusetts:	Listed
New Jersey:	Listed
Pennsylvania:	Listed

New York:	Listed
Rhode Island:	Not Listed

International Inventories

Chemical Name:	**Ethyl Alcohol**
TSCAL:	Listed
DSL:	Listed
NDSL:	Listed
EINECS:	Listed
CHINA:	Listed
KECL:	Listed
JAPAN:	Listed
AICS:	Listed

EU Regulations

Annex I Index#:	Annex I Index# : 603-002-00-5 Substance Name in Annex 1 : ethanol ethyl alcohol
Classification:	Flammable liquids, Category 2; H225

REACH (EU) 1907/2006

Hazard Statements:	H225: Highly flammable liquid and vapor
Precautionary Statements:	P210: Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking.
Symbols and Indications of Danger:	GHS02 Dgr: Danger
Specific Concentration Limits:	Not applicable
Export and Import	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
European Priority List	This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

16. OTHER INFORMATION

The above information is believed to be accurate, complete and current but does not purport to be all inclusive and shall be used as a guide. SeraCare Life Sciences makes no representation or warranties with respect to the product described herein, including but not limited to any implied warranties or merchantability or fitness for a particular use. SeraCare assumes no liability or responsibility and authorizes no other person to assume any additional liability or responsibility as a result of the use of this product or the information contained in the Safety Data Sheet.

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