

Protein A Agarose

Rev. Number: 3 Rev. Date: May 17, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Description: | | | Product Code |
|--------------------------|---|--|--|
| Protein A Agarose | | 5710-0005 (223-50-01) 5710-0004 (223-50-00) | |
| Hazardous Reagent | | Hazardo | ous Reagent Product code |
| PROTEIN A AGAROSE | | Catalog | No. listed above |
| Recommended Use: | Reference Reagent | | |
| Contact Manufacturer: | SeraCare Life Sciences 910 Clopper Road | Phone #: | (508) 244-6400 US Toll Free: (800) 676-1881 |
| | Gaithersburg, MD 20878 | Fax #: | (508) 634-3394 |
| | | Web: | www.seracare.com |
| | | Email: | customerservice@seracare.com |
| Emergency Telephone | Numbers: | | |
| AUSTRALIA – POISON | S INFORMATION CENTER | Telephone: | 13 11 26 - Hours: 24 hours |
| CANADIAN TRANSPOR | RT 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 RESP | PONSE 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. HAZARI | | CATION |
| Hazard Type | Fire Hazard: Flamma | ble | |
| | GHS Classification i | n accordance | with 29 CFR 1910 (OSHA HCS) |
| GHS Classification | Flammable liquids, C | Flammable liquids, Category 2; H225 | |
| Hazard Statements: | H225: Highly flamma | ble liquid and va | apor. |

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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: Acute Effects: Eve | The substance can be absorbed into the body by inhalation of its vapor and by ingestion. 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

| <u>Component</u> | <u>CHEMICAL</u> | <u>% Weight</u> | <u>CAS #:</u> |
|--------------------|-------------------------------------|-----------------|---------------|
| 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 |

Page 3 of 7 Protein A Agarose SDS-10015 Rev. Number: 3 Rev. Date: May 17, 2019 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** Reacts slowly with calcium hypochlorite, silver oxide and ammonia, causing fire and Hazards: 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 N/A the chemical: Protective equipment and As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH precautions for firefighters: 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 $< 100^{\circ}F$) **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) Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable Spillage / Disposal 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 Wear appropriate PPE. See section 8 Handling: Store at 2-8°C separated from strong oxidants and incompatible substances Store to Storage: 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.

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| 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. |
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The vapor mixes well with air, explosive mixtures are easily formed.

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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 20,000 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 | |
| | | |

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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 | Transport Emergency Card: TEC (R)-30S1170 | |
| Regulations | 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

chemicals

California Proposition 65:

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

| 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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