

Material Safety Data Sheet



1. Product and Company Identification

Product Name Octave™ MabCapture® A Columns
Catalog Number C1007S, C1008S, C1008E, C1009S
Supplier Semba Biosciences, Inc.
505 South Rosa Road, Suite 106A
Madison, Wisconsin 53719
866-634-1114 or 608-441-8009
Fax: 608-441-8329
Emergency Contact Information 866-634-1114 or 608-441-8009

2. Composition/Information on Ingredients

| Ingredient | CAS-No. | % |
|------------|---------|-----|
| Ethanol | 64-17-5 | 20% |

3. Hazards Identification

Emergency Overview Harmful
Routes of Entry Dermal contact, eye contact, inhalation, ingestion.

Potential Acute Health Effects
Inhalation May cause respiratory tract irritation.
Ingestion May cause gastrointestinal irritation.
Skin May cause skin irritation.
Eyes May cause eye irritation.

4. First Aid Measures

Eye Contact In case of contact, remove contact lenses if wearing. Flush eyes with copious amounts of water for at least 15 minutes. Seek medical attention.

Skin Contact In case of contact, wash skin thoroughly with soap and water. Rinse with copious amounts of water. Remove contaminated clothing and shoes. Seek medical attention.

Inhalation If inhaled, move person to fresh air. If individual is not breathing, trained personnel should provide artificial respiration. Seek medical attention.

Ingestion If swallowed, call a poison control center or physician. Never give anything by mouth to an unconscious person.

5. Fire-fighting Measures

Flammability of the Product Flammable (ethanol)
Suitable Extinguishing Media Water spray, Carbon dioxide, Foam, Dry Chemical

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Material Safety Data Sheet



Special Protective Equipment for Fire-fighters Wear appropriate protective equipment and self-contained breathing apparatus if necessary.

6. Accidental Release Measures

Personal Precautions Use appropriate personal protective equipment as described in section 8. Avoid breathing vapors, mist or gas. Avoid skin and eye contact. Avoid ingestion.

Environmental Precautions Avoid spread of spilled material and contamination of waterways, soil, drains and sewers. Notify appropriate authorities if product has caused environmental pollution.

Methods for Cleaning Up Clean contaminated areas and objects thoroughly while observing federal, state and local regulations.

7. Handling and Storage

Handling Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid inhalation and ingestion. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Storage Protect against physical damage.

8. Exposure Controls/Personal Protection

Engineering Controls Use only with adequate ventilation. If dust, vapors or mists are generated provide local exhaust ventilation or other engineering controls to keep exposure to airborne contaminants below any recommended or statutory limits.

Hygiene Measures Thoroughly wash hands, forearms and face after handling chemical products and before eating, smoking or using the lavatory and at the end of the working period. Appropriate techniques should be used to remove contaminated or potentially contaminated clothing. Wash contaminated clothing before reusing. Check that safety showers and eyewash stations are located near work areas.

Personal Protective Equipment

Respiratory If risk assessment indicates it is necessary, use a NIOSH (US) approved respiratory protective equipment. The selection of respiratory equipment must be based on anticipated exposure levels, product hazards and the safe working limits of the respirator.

Hands Compatible chemical-resistant gloves.

Eyes Chemical safety goggles

Skin Wear suitable protective clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks

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Material Safety Data Sheet



involved.

Environmental Exposure Controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and Chemical Properties

Physical State Slurry contained in column

10. Stability and Reactivity

Materials to Avoid Acids, alkali metals, ammonia, peroxides, alcohols, oxidizing agents
Conditions to Avoid Keep away from open flames and sources of ignition.
Hazardous Decomposition Products Carbon oxides

11. Toxicological Information

For ethanol:

Acute oral toxicity: Oral LD50 rat 7,060 mg/kg

The product has not been tested.

12. Ecological Information

Environmental Effects Do not allow undiluted product or large quantities of it to reach ground water, waterways and sewers.
Further information There is no quantitative data relating to the ecological impact of this product.

13. Disposal Considerations

Product Observe all federal, state and local environmental regulations. Processing, use or contamination of this product may change the waste management options.
Contaminated Packaging Dispose of the packaging in the same manner as unused product. Observe all federal, state and local environmental regulations.

14. Transport Information

DOT Regulations
Hazard Class 3
Identification Number UN1170
Packing Group III
Proper shipping name (technical name) ETHANOL SOLUTION
Label 3

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Material Safety Data Sheet



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| Land Transport ADR/RID (Cross-border) | |
| ADR/RID Class | 3 Flammable liquids |
| Danger Code (Kemler) | 3 |
| UN Number | 1170 |
| Packaging Group | III |
| Description of Goods | 1170 ETHANOL (ETHYL ALCOHOL), mixture |
| Air Transport IATA | |
| IATA Class | 3 |
| UN/ID Number | 1170 |
| Label | 3 |
| Packaging Group | III |
| Proper Shipping Name | ETHANOL SOLUTION |
| Maritime Transport IMDG | |
| IMDG Class | 3 |
| UN Number | 1170 |
| Label | 3 |
| Packaging Group | III |
| Marine Pollutant | No |
| Proper Shipping Name | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |

15. Regulatory Information

| | |
|--|---|
| SARA 313 Components | None of the ingredients are listed. |
| TSCA (Toxic Substances Control Act) | |
| Proposition 65 | |
| Chemicals known to cause cancer | None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity in females | None of the ingredients are listed. |
| Chemicals known to cause reproductive toxicity in males | None of the ingredients are listed. |
| Chemicals known to cause developmental toxicity | 64-17-5 Ethanol |
| Massachusetts Right to Know Components | Ethanol |
| Pennsylvania Right to Know Components | Ethanol |
| New Jersey Right to Know Components | Ethanol |
| Hazards Symbol | Harmful |
| Risk Phrases | Flammable Harmful if swallowed. May cause sensitization by inhalation and skin contact. |

16. Other Information

The information given herein is offered in good faith as accurate, but does not claim to be all inclusive and shall be used only as a guide. All materials may pose unknown hazards and should be used with caution. Users should consider this information supplemental to other information gathered by them and must determine independently the completeness and suitability of information from all sources with regard to the correct use, storage and disposal of these materials and the safety of employees, customers and the environment. Semba Biosciences, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for research use only.

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