

SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: Alpha Biosciences - Brucella Broth

B02-120 1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Culture medium

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Alpha Biosciences, Inc. 3651 Clipper Mill Road 21211 Baltimore - Maryland - USA Phone.: 410.467.9983 - Fax: 410.467.5088 www.alphabiosciences.com

Emergency phone number: 1.4

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

NFPA:

Health Hazards: 0 Flammability Hazards: 0 Instability Hazards: 0 Special Hazards: Non-applicable

29 CFR 1910.1200:

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

2.2 Label elements:





29 CFR 1910.1200:

Hazard statements:

Non-applicable

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

P501: Dispose of contents and / or their container according to the separated collection system used in your municipality Substances that contribute to the classification

Sodium chloride (CAS: 7647-14-5)

2.3 Hazards not otherwise classified (HNOC):

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Version: 1

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Mixture of substances

Components:

None of the substances contained in the mixture are above the values fixed in Appendix D to § 1910.1200.



SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

Consult a doctor in case of discomfort with this Safety data Sheet.

By inhalation:

In case of symptoms, move the person affected into fresh air.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet **By eye contact:**

Rinse with water until the product has been eliminated. In case of problems, consult a doctor with the SDS of this product.

By ingestion/aspiration:

In case of consumption in large quantities, it is recommended to seek medical assistance.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Product is non-flammable, low risk of fire by the inflammability characteristics of the product in normal conditions of storage, manipulation and use. In the case of the existence of sustained combustion as a result of improper manipulation, storage or use any type of extinguishing agent can be used (ABC Powder, water,...)

5.2 Specific hazards arising from the chemical:

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE



SECTION 7: HANDLING AND STORAGE (continued)

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is not necessary to take special measures to prevent environmental risks. For more information see subsection 6.2

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:35.6 °FMaximum Temp.:86 °FMaximum time:60 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

8.2 Appropriate engineering controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

| Pictogram | PPE | Remarks | |
|---|---------------------------------------|---|--|
| Mandatory hand protection | Protective gloves against minor risks | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional /industrial users, we recommend using chemical protection gloves. Use gloves in accordance with manufacturer 's use limitations and OSHA standard 1910.138 (29CFR) | |
| As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with | | | |

total reliability and has therefore to be checked prior to the application

D.- Ocular and facial protection



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Pictogram | PPE | Remarks |
|------------------------------|---|---|
| Mandatory face protection | Panoramic glasses against splash/projections. | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR) |

E.- Bodily protection

| Pictogram PPE | | Remarks | |
|---------------|----------------------|---|--|
| | Work clothing | Replace before any evidence of deterioration. | |
| | Anti-slip work shoes | Replace before any evidence of deterioration. | |

F.- Additional emergency measures

It is not necessary to take additional emergency measures.

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Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| Appearance | |
|---|--------------------------------------|
| Physical state at 68 °F: | Solid |
| Appearance: | Not available |
| Color: | Not available |
| Odor: | Not available |
| Odour threshold: | Non-applicable * |
| Volatility: | |
| Boiling point at atmospheric pressure: | Non-applicable * |
| Vapour pressure at 68 °F: | Non-applicable * |
| Vapour pressure at 122 °F: | Non-applicable * |
| Evaporation rate at 68 °F: | Non-applicable * |
| Product description: | |
| Density at 68 °F: | Non-applicable * |
| Relative density at 68 °F: | Non-applicable * |
| Dynamic viscosity at 68 °F: | Non-applicable * |
| Kinematic viscosity at 68 °F: | Non-applicable * |
| Kinematic viscosity at 104 °F: | Non-applicable * |
| Concentration: | Non-applicable * |
| pH: | Non-applicable * |
| Vapour density at 68 °F: | Non-applicable * |
| Partition coefficient n-octanol/water 68 °F: | Non-applicable * |
| *Not relevant due to the nature of the product, not providing | information property of its hazards. |
| | |



| SEC | TION 9: PHYSICAL AND CHEMICAL | PROPERTIES (continued) | |
|-----|--|------------------------|--|
| | Solubility in water at 68 °F: | Non-applicable * | |
| | Solubility properties: | Non-applicable * | |
| | Decomposition temperature: | Non-applicable * | |
| | Melting point/freezing point: | Non-applicable * | |
| | Explosive properties: | Non-applicable * | |
| | Oxidising properties: | Non-applicable * | |
| | Flammability: | | |
| | Flash Point: | Non-applicable | |
| | Flammability (solid, gas): | Non-applicable * | |
| | Autoignition temperature: | Non-applicable * | |
| | Lower flammability limit: | Non-applicable * | |
| | Upper flammability limit: | Non-applicable * | |
| | Explosive: | | |
| | Lower explosive limit: | Non-applicable * | |
| | Upper explosive limit: | Non-applicable * | |
| 9.2 | Other information: | | |
| | Surface tension at 68 °F: | Non-applicable * | |
| | Refraction index: | Non-applicable * | |
| | *Not relevant due to the nature of the product, not providing information property of its hazards. | | |

| 0.1 | Reactivity: | | | | |
|--------------|--|-------------------------|------------------------------------|-----------------------|-----------------------|
| - | No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7. | | | | |
| L 0.2 | | | | | |
| 0.2 | Chemically stable under the conditions of storage, handling and use. | | | | |
| 0.3 | | | | | |
| | Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected. | | | | |
| L 0.4 | | | | | |
| | Applicable for handling and storage at room temperature: | | | | |
| | Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
| | | | | | |
| | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 0.5 | Not applicable Incompatible materials: | •• | Not applicable | Not applicable | Not applicable |
| .0.5 | · · · | •• | Not applicable Oxidising materials | Not applicable | Not applicable Others |
| .0.5 | Incompatible materials: | | | | |
| LO.5 LO.6 | Incompatible materials: Acids | Water Not applicable | Oxidising materials | Combustible materials | Others |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

LD50 oral > 5000 mg/kg (rat)

Dangerous health implications:

- CONTINUED ON NEXT PAGE -

compounds.



SECTION 11: TOXICOLOGICAL INFORMATION (continued)

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure: A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met
- Corrosivity/Irritability: Based on available data, the classification criteria are not met
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Based on available data, the classification criteria are not met
 - Contact with the eyes: Based on available data, the classification criteria are not met
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met
 - Reproductive toxicity: Based on available data, the classification criteria are not met
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met
 - Cutaneous: Based on available data, the classification criteria are not met
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as
 - dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met

Other information:

Non-applicable

Specific toxicology information on the substances:

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Ecotoxicity (aquatic and terrestrial, where available):

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Not available

- **12.2 Persistence and degradability:** Not available
- 12.3 Bioaccumulative potential:
 - Not available
- **12.4 Mobility in soil:** Not available
- 12.5 Results of PBT and vPvB assessment: Non-applicable
- 12.6 Other adverse effects:
 - Not described



SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to 49 CFR on the Transport of Dangerous Goods:

| | | 5 | | |
|--|---|--|--|--|
| | UN number: | Non-applicable | | |
| | UN proper shipping name: | Non-applicable | | |
| 14.3 | Transport hazard class(es): | Non-applicable | | |
| | Labels: | Non-applicable | | |
| 14.4 | Packing group, if applicable: | Non-applicable | | |
| 14.5 | Marine pollutant: | No | | |
| 14.6 | 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in | | | |
| | connection with transport or | conveyance either within or outside their premises | | |
| | Physico-Chemical properties: | see section 9 | | |
| 14.7 | Transport in bulk (according | Non-applicable | | |
| | to Annex II of MARPOL | | | |
| | 73/78 and the IBC Code): | | | |
| Transpo | rt of dangerous goods by sea: | | | |
| With rega | ard to IMDG 39-18: | | | |
| 14.1 | UN number: | Non-applicable | | |
| 14.2 | UN proper shipping name: | Non-applicable | | |
| | Transport hazard class(es): | Non-applicable | | |
| | Labels: | Non-applicable | | |
| 14.4 | Packing group, if applicable: | Non-applicable | | |
| | Marine pollutant: | No | | |
| 14.6 | Special precautions which a u | user needs to be aware of, or needs to comply with, in | | |
| | connection with transport or | conveyance either within or outside their premises | | |
| | Physico-Chemical properties: | see section 9 | | |
| 14.7 | Transport in bulk (according | Non-applicable | | |
| | to Annex II of MARPOL | | | |
| | 73/78 and the IBC Code): | | | |
| Transport of dangerous goods by air: | | | | |
| With regard to IATA/ICAO 2020: | | | | |
| ······································ | | | | |

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SECTION 14: TRANSPORT INFORMATION (continued)

| 14.1 | UN number: | Non-applicable |
|------|-------------------------------|----------------|
| 14.2 | UN proper shipping name: | Non-applicable |
| 14.3 | Transport hazard class(es): | Non-applicable |
| | Labels: | Non-applicable |
| 14.4 | Packing group, if applicable: | Non-applicable |
| 14.5 | Marine pollutant: | No |

- **14.6** Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises Physico-Chemical properties: see section 9
- 14.7 Transport in bulk (according Non-applicable to Annex II of MARPOL 73/78 and the IBC Code):

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

SARA Title III - Toxic Chemical Release Inventory Reporting (Section 313): Non-applicable California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986): Non-applicable The Toxic Substances Control Act (TSCA) : Non-applicable Massachusetts RTK - Substance List: Non-applicable New Jersey Worker and Community Right-to-Know Act: Non-applicable New York RTK - Substance list: Non-applicable Pennsylvania Worker and Community Right-to-Know Law: Non-applicable CANADA-Domestic Substances List (DSL): Non-applicable CANADA-Non-Domestic Substances List (NDSL): Non-applicable NTP (National Toxicology Program): Non-applicable Minnesota - Hazardous substances ERTK: Non-applicable Rhode Island - Hazardous substances RTK: Non-applicable OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable Hazardous substances release notification under CERCLA sections 102-103 (40 CFR Part 302): Non-applicable Specific provisions in terms of protecting people or the environment: It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this

product.

Other legislation:

The Toxic Substances Control Act (TSCA) Occupational Safety and Health Standards (1910 Subpart Z - Toxic and Hazardous Substances)

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

Non-applicable

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Version: 1

Abbreviations and acronyms:





SECTION 16: OTHER INFORMATION (continued)

IMDG: International maritime dangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation COD: Chemical Oxygen Demand BOD5: 5-day biochemical oxygen demand BCF: Bioconcentration factor LD50: Lethal Dose 50 CL50: Lethal Concentration 50 EC50: Effective concentration 50 Log-POW: Octanol-water partition coefficient Koc: Partition coefficient of organic carbon

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