

Safety Data Sheet

Basic C-FERN® Medium, Prepared



Section 1 Product Description

Product Name: Basic C-FERN® Medium, Prepared
Recommended Use: Science education applications
Synonyms: N/A
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: May cause eye irritation.
May cause gastrointestinal discomfort.
May cause irritation to respiratory tract.
May cause irritation to skin.

Acute Toxicity Oral Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Dermal Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Gas Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

| <u>Chemical Name</u> | <u>CAS #</u> | <u>%</u> |
|--------------------------------|--------------|----------|
| Ammonium Nitrate | 6484-52-2 | 100 |
| Calcium chloride | 10043-52-4 | |
| Magnesium sulfate heptahydrate | 10034-99-8 | |
| Potassium phosphate, monobasic | 7778-77-0 | |

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Calcium Oxides, Sulfur Oxides

Section 6 Spill or Leak Procedures

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Steps to Take in Case Material Is Released or Spilled:

No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Avoid the generation of dusts during clean-up.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7

Handling and Storage

Handling: N/A
Storage: Keep container tightly closed in a cool, well-ventilated place.
Storage Code: Green - general chemical storage

Section 8

Protection Information

| <u>Chemical Name</u> | <u>ACGIH</u> | <u>OSHA PEL</u> | | |
|----------------------|--------------|-----------------|-------|--------|
| | (TWA) | (STEL) | (TWA) | (STEL) |
| No data available | N/A | N/A | N/A | N/A |

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Natural latex,, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride

Section 9

Physical Data

Formula: See Section 3
Molecular Weight: N/A; Product is a mixture
Appearance: Liquid
Odor: No data available
Odor Threshold: No data available
pH: No data available
Melting Point: No data available
Boiling Point: No data available
Flash Point: No data available
Flammable Limits in Air: N/A N/A

Vapor Pressure: N/A
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air=1): N/A
Specific Gravity: N/A
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Acids, Strong oxidizing agents, Strong reducing agents
Hazardous Decomposition Products: Sulfur Oxides, Calcium Oxides, Carbon dioxide, Carbon monoxide
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation and ingestion.
Symptoms (Acute): N/A
Delayed Effects: No data available

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Acute Toxicity:

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|------------|----------------------------|----------------------------|-----------------|
| Ammonium nitrate | 6484-52-2 | Oral LD50 Rat = 2217 mg/kg | Dermal LD50 Not determined | Not determined |
| Calcium chloride | 10043-52-4 | Oral LD50 Rat = 2301 mg/kg | Dermal LD50 > 4640 mg/kg | |
| Magnesium sulfate heptahydrate | 10034-99-8 | Oral LD50 Not available | | |
| Potassium phosphate, monobasic | 7778-77-0 | | | |

Carcinogenicity:

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|--------------------------------|------------|------------|------------|------------|
| Ammonium nitrate | 6484-52-2 | Not listed | Not listed | Not listed |
| Calcium chloride | 10043-52-4 | | | |
| Magnesium sulfate heptahydrate | 10034-99-8 | | | |
| Potassium phosphate, monobasic | 7778-77-0 | | | |

Chronic Effects:

| | |
|------------------------------|---|
| Mutagenicity: | No evidence of a mutagenic effect. |
| Teratogenicity: | No evidence of a teratogenic effect (birth defect). |
| Sensitization: | No evidence of a sensitization effect. |
| Reproductive: | No evidence of negative reproductive effects. |
| Target Organ Effects: | |
| Acute: | See Section 2 |
| Chronic: | Not listed as a carcinogen by IARC, NTP or OSHA. |

Section 12

Ecological Data

| | |
|-------------------------------|---|
| Overview: | This material is not expected to be harmful to the ecology. |
| Mobility: | No data |
| Persistence: | No data |
| Bioaccumulation: | No data |
| Degradability: | No data |
| Other Adverse Effects: | No data |

| Chemical Name | CAS Number | Eco Toxicity |
|---------------|------------|--------------|
| N/A | 6484-52-2 | |
| | 10043-52-4 | |
| | 10034-99-8 | |
| | 7778-77-0 | |

Section 13

Disposal Information

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|--------------------------------|---|
| Disposal Methods: | Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. |
| Waste Disposal Code(s): | Not Determined |

Section 14

Transport Information

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|---|--|
| Ground - DOT Proper Shipping Name: | Air - IATA Proper Shipping Name: |
| N/A | Not regulated for air transport by IATA. |

Section 15

Regulatory Information

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|---------------------|---|
| TSCA Status: | All components in this product are on the TSCA Inventory. |
|---------------------|---|

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|------------------|------------|------------|----------|-----------|-----------|---------------|
| Ammonium nitrate | 6484-52-2 | No | No | No | No | No |
| | 10043-52-4 | | | | | |
| | 10034-99-8 | | | | | |
| | 7778-77-0 | | | | | |

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Section 16

Additional Information

Revised: 09/09/2015

Replaces: 07/31/2015

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

| | | | |
|--------|---|------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |