

SAFETY DATA SHEET (SDS)



Product Name: CHOgro® Expression Medium

Product Number: MIR 6201

Revision Date: 02MAR2022

Print Date: 21FEB2024

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SECTION 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier:

1.1.1. **Product Name:** CHOgro® Expression Medium, Dry Powder

1.1.2. **Product Code:** MIR 6201

1.1.3. **CAS No.:** Not applicable.

1.2. Relevant Identified Uses of the Mixture and Uses Advised Against:

1.2.1. **Identified Uses:** For research use only.

1.2.2. **Uses Advised Against:** Not known.

1.3. Details of the Supplier of the SDS:

1.3.1. **Company:** Mirus Bio LLC

1.3.2. **Address:** 5602 Research Park Blvd, Suite 210, Madison, WI 53719, USA

1.3.3. **Telephone No.:** 888.530.0801 (Toll Free within the U.S.) or +1.608.441.2852

1.3.4. **Fax:** +1.608.441.2849

1.3.5. **Email:** info@mirusbio.com

1.4. Emergency Telephone No.:

1.4.1. **US and Canada:** +1.800.633.8253

1.4.2. **International:** +1.801.629.0667

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture:

US CFR 1910.1200

This substance or mixture is not considered hazardous.

2.2. Label Elements:

2.2.1. **Product Name:**

CHOgro® Expression Medium, Dry Powder

2.2.2. **Hazard Pictogram(s):**

Not applicable

2.2.3. **Signal Word(s):**

Not applicable

2.2.4. **Hazard Statement(s):**

Not applicable.

2.2.5. **Precautionary Statement(s):**

Not applicable.

2.3. **Other Hazards:** Not applicable.

2.4. **Additional Information:** None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

Not applicable.

3.2. Mixtures:

This mixture contains no ingredients at their given concentration considered to be hazardous to health.

SECTION 4. FIRST AID MEASURES

4.1. Description of First Aid Measures:

4.1.1. Inhalation: Treat symptomatically. Remove to fresh air.

4.1.2. Skin Contact: Take off all contaminated clothing immediately. Rinse skin with water.

4.1.3. Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison center and/or doctor.

4.1.4. Ingestion: Rinse mouth with water. Treat symptomatically.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed:

Exposure via inhalation or eye contact may cause irritation.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed:

Call a poison center and/or doctor. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing Media:

5.1.1. Suitable Extinguishing Media:

Use an extinguishing agent suitable for the surrounding fire.

5.1.2. Unsuitable Extinguishing Media:

None known.

5.2. Specific Hazards Arising from the Mixture:

No specific fire or explosion hazard.

5.3. Advice for Firefighters:

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures:

Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

6.2. Environmental Precautions:

This material and its container must be disposed of in a safe way. Avoid release into soil, waterways, drains and sewers. Inform relevant authorities if the product has caused environmental pollution.

6.3. Methods and Materials for Containment and Cleaning Up:

Vacuum or sweep material. Adsorb liquid spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling:

Handle in accordance with good industrial hygiene and safety practices. Wear protective gloves and eye/face protection.

7.2. Conditions for Safe Storage, Including Any Incompatibilities:

Store tightly closed in a dry, well-ventilated place. Keep cool.

7.2.1. Storage Temperature: 4°C.

7.2.2. Storage Life: Stable under normal conditions.

7.3. Specific End Use(s): For research use only.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters:

8.1.1. Occupational Exposure Limits: Not applicable.

8.2. Exposure Controls:

8.2.1. Appropriate Engineering Controls:

Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal Protective Equipment:

8.2.2.1. Eye Protection: Tightly fitting safety glasses with side shields.

8.2.2.2. Skin Protection: Protective clothing and gloves.

8.2.2.3. Respiratory Protection: Normally no personal respiratory protection is necessary. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if irritation or other symptoms are experienced.

8.2.2.4. Thermal Hazards: None known.

8.3. Environmental Exposure Controls:

Avoid release to the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties:

9.1.1. Appearance Solid powder
Color: Off-white.

9.1.2. Odor: No data available.

9.1.3. Odor Threshold: No data available.

9.1.4. pH: No data available.

9.1.5. Melting Point/freezing Point: No data available.

9.1.6. Initial Boiling Point and Boiling Range: No data available.

9.1.7. Flash Point: No data available.

9.1.8. Evaporation Rate: No data available.

9.1.9. Flammability (Solid, Gas): No data available.

9.1.10. Upper/lower Flammability or Explosive Limits:

Upper explosion limit: No data available.

Lower explosion limit: No data available.

9.1.11. Vapor Pressure: No data available.

9.1.12. Vapor Density: No data available.

9.1.13. Density: No data available.

9.1.14. Relative Density: No data available.

9.1.15. Solubility(ies): Water soluble.

9.1.16. Partition Coefficient: No data available.

9.1.17. Auto-ignition Temperature: No data available.

9.1.18. Decomposition Temperature: No data available.

9.1.19. Viscosity: No data available.

9.1.20. Explosive Properties: No data available.

9.1.21. Oxidizing Properties: No data available.

9.2. Other Information: None.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity: None anticipated.

10.2. Chemical Stability: Stable under recommended storage conditions.

10.3. Possibility of Hazardous Reactions: No hazardous reactions known if used for its intended purpose.

10.4. Conditions to Avoid: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static

electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

10.5. Incompatible Materials: Strong oxidizing agents.

10.6. Hazardous Decomposition Products: No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects:

11.1.1. Acute Toxicity – Ingestion: L-serine, LD50, 14 g/kg (rat)

L-valine, LD50, 2 g/kg (rat)

L-cysteine, hydrochloride, hydrate (1:1:1), LD50, 1.89 g/kg (rat)

11.1.2. Acute Toxicity – Skin Contact: Not classified.

11.1.3. Acute Toxicity – Inhalation: Not classified.

11.1.4. Skin Corrosion/Irritation: Not classified.

11.1.5. Serious Eye Damage Irritation: Not classified.

11.1.6. Skin Sensitization Data: Not classified.

11.1.7. Respiratory Sensitization Data: Not classified.

11.1.8. Germ Cell Mutagenicity: Not classified.

11.1.9. Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

11.1.10. Reproductive Toxicity: Not classified.

11.1.11. Lactation: Not classified.

11.1.12. Specific Target Organ Toxicity - Single Exposure: Not classified.

11.1.13. Specific Target Organ Toxicity - Repeated Exposure: Not classified.

11.1.14. Aspiration Hazard: Not classified.

11.2. Additional Information: None.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity (Aquatic and Terrestrial, Where Available):

L-valine, LC50 - Fish - 10,000 mg/l - 96 h

L-serine, EC50 - Daphnia magna (Water flea) - 83 mg/l - 48 h

L-serine, NOEC50 - Algae - 1,000 mg/l - 72 h

12.2. Persistence and Degradation: L-valine, 82% (28 days), readily biodegradable.

12.3. Bioaccumulative potential: L-serine, L-valine, L-cysteine, hydrochloride, hydrate (1:1:1): low.

12.4. Mobility in Soil: No data available.

12.5. Other Adverse Effects: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

- 13.1. Waste Treatment Methods:** Remove waste in accordance with local and/or national regulations. Offer surplus and non-recyclable solutions to a licensed disposal company.
- 13.2.** To minimize exposure, refer to Section 8 (Exposure Controls/Personal Protection) of the SDS.

SECTION 14. TRANSPORT INFORMATION

- 14.1. UN Number:** Not regulated.
- 14.2. UN Proper Shipping Name:** Not regulated.
- 14.3. Transport Hazard Class(es):** Not regulated.
- 14.4. Packing Group, If Applicable:** Not regulated.
- 14.5. Environmental Hazards:** Not classified as a marine pollutant.
- 14.6. Guidance on Transport in Bulk (According to Annex II of MARPOL 73/783 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)):** None.
- 14.7. Other Special Precautions Related to Transport:** None.

SECTION 15. REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations Specific for the Product in Question:

SARA 302/313 Components

SARA 302: sodium selenite, <0.0005665% (302 TPQ: 100/10,000 lb; 304 RQ: 100 lb)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

None.

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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

Listed.

WHMIS Hazard Class

Non-controlled. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

SECTION 16. OTHER INFORMATION

- 16.1. Revision Date:** 22 FEB 2022
- 16.2. Reason for Revision:** Updated Section 1.2 and 7.3 to clarify usage as "For research use only."
- 16.3. Additional Information:** None.

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