

Safety Data Sheet

Crosslinking Agent

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product

Crosslinking Agent (CaCl₂)

name:

1.2 Brand: Foldink

1.3 Product Number:

#CA10001

1.4 General use: For use as an ionic crosslinker of bioinks for 3D bioprinting, cell

encapsulation, tissue engineering, regenerative medicine and drug

delivery research. Not for human use, for research only.

1.5 Company Address:

Foldink Corp.

2601 Preston Rd. Suite 3011.

Frisco, Texas 75034, USA Tel.: +1 857 302 4934

Email: info@foldink.bio

www.foldink.bio

Foldink LLC

22 Orbeli Brothers Street, 0028,

Yerevan, Republic of Armenia

Tel.: +37441041013 Email: info@foldink.bio

www.foldink.bio

2. HAZARDS IDENTIFICATION

Potential health effects: Not a hazardous substance or mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EC No.	EC Class	Composition
Calcium Chloride	10043-52-4	233-140-8	H319 (For dry calcium chloride powder)	0.57%
PBS buffer solution	None	None	Not classified as hazardous	

4. FIRST AID MEASURES

- **4.1 In case of eye contact:** Flush eyes with water as a precaution. Consult a physician.
- **4.2 In case of skin contact:** Wash with soap and plenty of water. Consult a physician.
 - **4.3 If swallowed:** Rinse mouth with plenty of water. Consult a physician.
 - **4.4 If inhaled:** Move person to fresh air. If any breathing difficulty or discomfort occurs and persists, obtain medical attention.
 - **4.5 Notes to a medical doctor:** Show this safety data sheet to the doctor in attendance. This product has low oral and inhalation toxicity. It is not a skin sensitizer and is nonirritating to the skin and eyes.

5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media: No data available.
- **5.2 Fire/explosion hazards:** No data available.
- **5.3 Firefighting procedures:** No data available.
- 5.4 Flammable limits: No data available.

6. ACCIDENTAL RELEASE MEASURES

- **6.1 Personal precautions, protective equipment, and emergency procedures:** Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection, see section 8.
- **6.2 Environmental precautions:** Do not let product enter drains.
- **6.3 Methods and materials for containment and cleaning up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

- **7.1 Precautions for safe handling:** Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
- **7.2 Conditions for safe storage**: Keep the container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limits: N/A.

8.2 Personal protection equipment

- a) Eyes and face: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- b) Respiratory: Respiratory protection is not required. Where protection from nuisance levels of dust is desired, use type N95 (US) or P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- c) Protective clothing: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- d) Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

9. PHYSICAL AND CHEMICAL PROPERTIES.

Appearance: Translucent liquid

Upper/lower flammability: No data available

Odor: Odorless

Odor threshold: Not applicable

Vapor pressure: No data available

Vapor density: No data available

pH: 6.5-7.4

Relative density: 1 g/mL

Melting point: Not applicable

Boiling point: Around 100°C

Flash point: No data available

Evaporation rate: No data available

Flammability: No data available

Partition coefficient: No data available

Autoignition temp: No data available

Decomposition temp: No data available

Viscosity: No data available

10. STABILITY AND REACTIVITY

Conditions to avoid: Freezing.

Reactivity: No data available.

Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition No data available. In the event of fire, see section 5.

products:

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral LD50: No data available.

Inhalation: No data available.

Dermal: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/eye irritation: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

No data available.

Specific target organ toxicity - single

exposure:

Specific target organ toxicity - repeated No data available.

exposure:

Aspiration hazard: No data available.

12. ECOLOGICAL INFORMATION

- **12.1 Toxicity:** No data available.
- 12. 2 Persistence and degradability: No data available.
- 12.3 Bioaccumulative potential: No data available.
- 12.4 Mobility in soil: No data available.
- **12.5 Results of PBT and vPvB assessment**: PBT/vPvB assessment not available as

chemical safety assessment not required/not conducted.

12.6 Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product: Dispose according to applicable local, state, and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT): Not dangerous goods.

International Maritime Dangerous Goods (IMDG): Not dangerous goods.

ADR – European agreement concerning the international carriage of dangerous goods by road: Not regulated.

15. REGULATORY INFORMATION

SARA 302 components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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

SARA 311/312 hazards: No SARA hazards.

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components: No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right to Know components: No components are subject to the New Jersey Right to Know Act.

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.

16. OTHER INFORMATION

HMIS Rating

Health hazard: 0
Chronic Health Hazard: 0
Hazard: 0
Physical Hazard: 0

NFPA Rating

Health hazard:

Fire Hazard: 0

Reactivity Hazard 0

0