



Material Safety Data Sheet

Glucono-Delta-Lactone(GDL) MSDS

1. SUBSTANCE IDENTIFICATION

- 1.1. Product Name: Glucono-Delta-Lactone
- 1.2. Description: Glucono-Delta-Lactone is a organic compound manufactured through fermentation.
- 1.3. Chemical Formula: C₆H₁₀O₆
- 1.4. Molecular weight: 178.14
- 1.5. CAS #: 90-80-2
- 1.6. EINECS #: 202-016-5
- 1.7. Manufactured by: Foodchem International Corporation, Shanghai China.
- 1.8. Supplied by: Foodchem International Corporation, Shanghai China.
- 1.9. Usage: In food as Preservatives

2. Composition

- 2.1. Glucono-Delta-Lactone: 99-100.5%
- 2.2. Hazardous impurities: Sulfate 0.020%, Heavy Metals(Pb) 10PPM, Arsenic 1PPM

3. Physical/Chemical Characteristics

- 3.1. Physical State: Powder
- 3.2. Appearance: WHITE CRYSTALLINE ODORLESS POWDER
- 3.3. Odor: Odorless
- 3.4. pH: 1.5~1.8
- 3.5. Melting point/range: 152 ° C
- 3.6. Boiling point: Not available
- 3.7. Bulk density: 0.9 g/cm³
- 3.8. Solubility: 470 g/l @ 20 ° C

4. Stability/Reactivity

- 4.1. Chemical Stability: Stable under normal temperatures and pressures
- 4.2. Shelf Life: 24 months period
- 4.3. Hazardous decomposition: Carbon oxides (CO, CO₂)
- 4.4. Hazardous polymerization: Will not occur
- 4.5. Incompatible with: Not available

5. Handling/Storage

- 5.1. Storage: stored in a cool and dry place and kept away from strong light and heat.
- 5.2. Handling precaution: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust.

6. Exposure Control

- 6.1. Engineering Controls: Safety shower and eye bath. Mechanical exhaust required.
- 6.2. Respiratory protection: NIOSH/MSHA or European Standard EN 149 approved respirator
- 6.3. Eye Protection: Protective eyeglasses or chemical safety goggles
- 6.4. Skin Protection: Wear appropriate protective gloves and clothes to minimize skin contact.
- 6.5. Other: Consult professionals if Glucono-Delta-Lactone need to be handled under some special conditions.

7. Hazards Identification



- 7.1. Hazardous overview: Glucono-Delta-Lactone is Slightly hazardous in case of skin contact, eye contact, ingestion or inhalation.
- 7.2. Contact with eyes: May cause eye irritation.
- 7.3. Contact with skin: May cause skin irritation.
- 7.4. Ingestion: No hazard expected in normal industrial handling
- 7.5. Inhalation: May cause respiratory tract irritation.
- 7.6. Other: Not Applicable

8. First Aid Measures

- 8.1. Contact with eyes: Flush immediately with plenty of water for 15 minutes and seek medical advice
- 8.2. Contact with skin: Wash the affected area with water, remove contaminated clothing and launder before re-use. Seek medical advice if irritation develops or persists.
- 8.3. Ingestion: No specific treatment is necessary
- 8.4. Inhalation: Remove from exposure, move to fresh air and seek medical advice immediately.

9. Fire and Explosion Data

- 9.1. General information: May be combustible at high temperature.
- 9.2. Flash point: Not available
- 9.3. Ignition control: Avoid ignition sources where Glucono-Delta-Lactone dust might be generated
- 9.4. Dust control: Keep the handling area with adequate ventilation
- 9.5. Extinguishing Media: Water spray, dry chemical or carbon dioxide
- 9.6. Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container

10. Transport Information

- 10.1. No special requirements and no restrictions on transportation by land, sea or air.

11. Ecological Information

- 11.1. Glucono-Delta-Lactone may pose toxic effect to wildlife. Toxicity to fish LD50 = 360 mg/l.

12. Other Information

- 12.1. This Safety Data Sheet of Glucono-Delta-Lactone is based upon a limited review of Foodchem International Corporation files and standard Toxicological handbooks. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Foodchem International Corporation be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Foodchem International Corporation has been advised of the possibility of such damages.

Website:<http://www.foodchemadditives.com>

E-Mail: inquiry@foodchem.cn
[Glucono-Delta-Lactone MSDS](#)