



Chemistry for Safer, Sustainable Life

# SAFETY DATA SHEET

## Section 1: Identification

**Product Name:** Magnesium formate dihydrate

**Product ID:** 100FO23

**Chemical Name/Synonyms:** Formic acid magnesium salt dihydrate, magnesium diformate dihydrate

**CAS:** 6150-82-9

**Molecular Formula:** C<sub>2</sub>H<sub>6</sub>MgO<sub>6</sub>

**Molecular weight:** 150.37 g/mol

**Potential Uses:** Reagent, MOF precursor, protein precipitant, foliar fertilizer ingredient, biomolecule salting agent, etc.

**Restrictions on Uses:** Not for medical, household, or food use.

**Company:** BioFuran Materials LLC

920 William Pitt Way, Pittsburgh, PA 15238

**In emergency call 911 or for information about this SDS, use this contact phone#:** 412-376-7101

## Section 2: GHS Hazard(s) Identification

**Hazard Classification:** May cause skin irritation (Category 2), H315

May cause eye irritation (Category 2A), H319

May cause respiratory tract irritation (3), H335

**Signal Word(s):** Warning

**Pictograms:**



**Precautionary Statements:**

P280 – Wear protective gloves / protective clothing, eye protection / face protection

P302+P351+P338 – If in your eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and rinse for at least 15 minutes.

P312 – Immediately call a poison control center or a physician if you feel unwell.

**Other hazards:** none

## Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
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Magnesium formate dihydrate	Magnesium diformate dihydrate	6150-82-9	100%
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**Section 4: First-Aid Measures**

**After skin contact:** Wash off with soap and plenty of water. Consult a physician.  
**After eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
**After inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
**After swallowing:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Section 5: Fire-Fighting Measures**

**General:** Magnesium formate dihydrate is not expected to be a fire hazard.  
**Suitable extinguishing agents:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
**Special protective equipment for firefighters:** Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

**Section 6: Accidental Release Measures**

**Personal precautions:** Wear protective equipment as described in Section 8.  
**Measures for environmental protection:** Do not dispose product in municipal sewers or drains. Notify authorities if product enters sewers or public waters.  
**Measures for cleaning/collecting:** Pick up and arrange disposal without creating dust. Sweep up and shovel any spillages. Keep all wastes and residues in suitable, closed containers for disposal.

**Section 7: Handling and Storage**

**Handling:** Avoid contact with skin and eyes. Avoid dust formation and do not breathe dust. Provide local exhaust or general room ventilation to minimize exposure to dust.  
**Storage:** Keep container tightly closed.  
**General Hygiene:** Eating, drinking, and smoking in the work area is prohibited. Wash hands after use and remove contaminated clothing and protective equipment before entering eating areas.

**Section 8: Exposure Controls/Personal Protection**

Component	CAS No.	Value	Control Parameters
Magnesium formate dihydrate	6150-82-9	ACGIH TWA (mg/m <sup>3</sup> )	Not listed

**General protective and hygienic measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.  
**Breathing equipment:** Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified dust and mist (teal cartridge) respirator.  
**Protection of hands:** Neoprene or nitrile rubber gloves.  
**Eye protection:** Chemical goggles. Contact lenses should not be worn.

### Section 9: Physical and Chemical Properties

**Appearance:** Off white granular powder  
**Odor:** Very faint formic acid odor  
**Odor threshold:** No data available  
**pH:** 7-8 10wt% solution in water  
**Melting point/melting range:** No data available  
**Boiling point/boiling range:** No data available  
**Flash point:** No data available  
**Evaporation rate:** No data available  
**Flammability:** No data available  
**Upper/lower flammability or explosive limits:** No data available  
**Auto ignition temperature:** No data available  
**Danger of explosion:** No data available  
**Vapor pressure:** No data available  
**Vapor density:** No data available  
**Relative density:** No data available  
**Solubility in/Miscibility with water:** 140-148g/L

### Section 10: Stability and Reactivity

**Reactivity:** No known reactivity under normal conditions of use  
**Chemical stability:** Stable under ambient conditions. Keep in closed container.  
**Conditions to avoid:** Avoid generating dust  
**Incompatible materials:** Strong oxidizing agents, strong acids, strong bases  
**Hazardous decomposition products:** oxides of carbon and sodium

### Section 11: Toxicological Information

**Acute toxicity:** No known reactivity under normal conditions of use.  
**Potential routes of exposure/potential health effects**  
**Skin:** No irritation established  
**Eye:** No irritation established  
**Inhalation:** No irritation established  
**Ingestion:** Maybe harmful if swallowed  
**Carcinogenic effects:** No data available  
**Mutagenic effects:** Not mutagenic  
**Reproductive toxicity:** No data available  
**Sensitization:** No data available  
**Target organs:** No data available

### Section 12: Ecological Information

**Ecotoxicity:** No data available  
**Mobility:** No data available  
**Biodegradation:** readily biodegradable  
**Bioaccumulation:** Low bioaccumulation potential  
**Bioaccumulation:** Not persistent

### Section 13: Disposal Considerations

This material or its residues should not be disposed in drains or in regular trash cans. Contact a licensed waste disposal professional to dispose this material or its residues.

### Section 14: Transport Information

**DOT regulations:** Not dangerous goods

- **Land transport ADR/RID (cross-border):** Not regulated for transport
- **Maritime transport IMDG:** Not dangerous goods
- **Air transport ICAO-TI and IATA-DGR:** Not dangerous goods

### Section 15: Regulatory Information (non-mandatory)

#### US Federal Regulations

**SARA Section 302:** This material is not subject to reporting requirements of SARA Title III, Section 302

**SARA Section 313:** This material is subject to reporting levels established by SARA Title III, Section 313

**TSCA (Toxic Substances Control Act):** Magnesium formate dihydrate is not listed on the United States TSCA

### Section 16: Other Information

**SDS date of preparation/update:** 09/10/2020 Version 001