

Storage & Handling Guide

EID600 (Ultra-Fine Iron Powder)

1. General Conditions

- Store in tightly sealed, non-reactive containers (HDPE, polypropylene, or glass with PTFE-lined cap).
- Avoid metal containers that could corrode or react.
- Keep in a cool, dry, well-ventilated area, away from sunlight and humidity.
- For best stability, store under inert gas (nitrogen or argon).

2. Fire & Explosion Precautions

- Treat as a combustible dust: keep away from open flames, sparks, and hot surfaces.
- Do not store near oxidizers (nitrates, peroxides) or strong acids.
- Use explosion-proof storage cabinets for bulk quantities.
- Ground containers during transfer to avoid static buildup.

3. Secondary Containment

- Place containers inside a plastic tray or spill containment box.
- Clearly label with hazard warnings: 'Combustible Dust' and 'Metal Powder'.

4. Shelf Life & Monitoring

- Inspect regularly for signs of oxidation (rust, clumping).
- Use desiccant packs (silica gel, molecular sieves) to control moisture.
- Follow FIFO (first in, first out) stock rotation.

5. Quantity Considerations

- Laboratory scale (≤ 100 g): sealed bottles with desiccant in a dry cabinet.
- Industrial scale: sealed drums/bags under inert atmosphere in indoor dry warehouses, compliant with NFPA 484.

6. Safety Labeling

Each container should display:

- Product name: EID600 Ultra-Fine Iron Powder
- Hazard warnings: 'Combustible Dust', 'Keep away from oxidizers/ignition sources'
- Safety symbols: Fire Risk, Wear Gloves, Avoid Inhalation