



TECHNICAL DATA SHEET

Product Name: Anhydrous Ferric Orthophosphate

CAS Number: 10045-86-0

Molecular Formula: FePO_4

Molecular Weight: 150.82

EINECS No.: 233-149-7

EC Code: Not allocated

1. Product Description

Anhydrous Ferric Orthophosphate is a yellowish to off-white inorganic powder supplied in an anhydrous form. It is a stable source of iron and phosphorus and is widely used in **industrial, agricultural, and feed-related applications**. Due to its low moisture content and good chemical stability, it is suitable for long-term storage and formulation use where controlled iron and phosphate levels are required.

2. Specification

| Parameter | Specification |
|-----------------------------|-------------------------------|
| Appearance | Yellowish to off-white powder |
| Bulk density | 0.6 – 1.0 g/cm ³ |
| Particle size | 80 – 200 mesh |
| Identification | Positive |
| Iron (Fe) | 28.0% – 30.0% |
| Phosphate (PO_4) | 60.0% – 65.0% |
| pH (1% suspension) | 3.0 – 5.0 |
| Loss on Drying | ≤ 1.0% |
| Moisture Content | ≤ 1.0% |
| Heavy Metals (Pb) | ≤ 20 ppm |
| Arsenic (As) | ≤ 3 ppm |
| Chloride | ≤ 0.20% |
| Sulfate | ≤ 0.30% |

3. Applications

Fertilizer and soil conditioners – as a source of iron and phosphorus

Industrial formulations, catalysts, and specialty materials

Feed-related applications (subject to local regulations and grade approval)

Raw material for research and material development

4. Packaging and Storage

Packaging:

25 kg net weight per paper bag or fiber drum, inner with PE liner

Shelf Life:

24 months when properly stored

Storage Conditions:

Store in a cool, dry place. Keep containers tightly closed and protected from moisture.

5. Regulatory Status

Industrial / agricultural / feed-related grade (depending on specification)

Not intended for pharmaceutical or direct human consumption use

Manufactured under standard quality management systems

Documentation available: **COA, TDS, MSDS**