



TECHNICAL DATA SHEET

Product Name: Magnesium Dihydrogen Phosphate

Other Name: Monomagnesium Phosphate

CAS No.: 13092-66-5

Chemical Formula: $Mg(H_2PO_4)_2 \cdot xH_2O$

Appearance: White crystalline powder or granules

Odor: Odorless

Purity: $\geq 98\%$

Chemical & Physical Properties

Property	Specification
Magnesium (Mg)	9.5 – 11.0 %
Phosphate (PO_4^{3-})	36 – 38 %
Moisture	$\leq 5.0\%$
pH (10% solution)	4.5 – 6.0
Water Insolubles	$\leq 0.2\%$
Bulk Density	0.8 – 1.2 g/cm ³
Particle Size	Pass 80 mesh

Specifications

Item	Test Method	Specification
Appearance	Visual	White crystalline powder or granules
Magnesium Content	ICP-OES	9.5 – 11.0 %
Phosphate Content	Gravimetric / ICP	36 – 38 %
Moisture	Oven drying	$\leq 5\%$
pH (10% solution)	pH meter	4.5 – 6.0
Water Insolubles	Gravimetric	$\leq 0.2\%$
Heavy Metals (as Pb)	ICP-MS	$\leq 10\text{ ppm}$
Arsenic (As)	ICP-MS	$\leq 3\text{ ppm}$

Applications

Food Additive: Acid regulator, phosphate source, nutritional supplement

Feed Additive: Mineral supplement for animal nutrition

Chemical Industry: Fertilizers, ceramics, phosphate compounds

Advantages

High purity, stable quality

Soluble in water, easy to use in formulations

Food and feed grade available

Supports nutritional fortification

Packaging & Storage

Packed in **25 kg kraft paper bags or poly-lined bags**

Keep in **cool, dry, ventilated warehouse**

Shelf life: 2 years in unopened original packaging

Regulatory Status

Food Grade: Compliant with **FCC / GB standards**

Feed Grade: Compliant with **feed additive regulations**

Heavy metals and microbiological limits meet international standards