

# .85% PHOSPHORIC ACID FOOD GRADE (D-85)

**NOMENCLATURE:** Phosphoric Acid  
Orthophosphoric Acid

**CHEMICAL FORMULA:** H<sub>3</sub>PO<sub>4</sub>

**MOLECULAR WEIGHT:** 98,00

**GRADE:** Food

**REGISTRATION:** Waiver from the obligation of registration in ANVISA (Article 6 of Decree 55.781, of March 26, 1965, item 5.1.6.2 of Resolution No. 23, of March 15, 2000 - Federal Official Newspaper (DOU) 03/16/2000).

**FUNCTION:** Acidulant / Sequestrant (INS No. 338)

**MAIN APPLICATIONS:**

- acidulant in sodas, especially in the cola types;
- stabilizer of vegetal oils;
- manufacturing of phosphorous salts;
- acidulant in jams, sweets, salad dressings;
- nutrient, acidulant or buffering agent in microbiological operations, such as in the production of antibiotics;
- biological yeasts, monosodium glutamate;
- manufacture of pharmaceuticals, such as in the obtaining of insulin, fortifiers and glycerophosphates;
- production of dicalcic phosphate for animal food;
- clarification of sugarcane, in the production of sugar;
- sugar refinement;
- biological treatment of effluents;
- kaolin whitening;
- refractory production;
- chemical or electrochemical polishing of aluminum parts;
- formulations of foliar fertilizers;
- active coal production;
- strippers or deoxidants.

**CAUTIONS:** Avoid contact with the skin and eyes. In case of contact, wash the affected parties in running water. For the eyes, seek medical assistance.

**PRESENTATION:** In bulk (in tank trucks of 14,000 or 28,000 kg), plastic drums of 40 kg, barrels 340 kg or IBC with 1,685 kg.

**SHELF LIFE:** 02 years.

**DESCRIPTION:** Clear and viscous liquid, exempt from sedimented and suspended particles. Strongly acid flavor, mixable with water and alcohol in all proportion.  
**CONCENTRATION:** Watery solution, containing at least, 85% of H<sub>3</sub>PO<sub>4</sub> in weight.

**SPECIFICATIONS AND TYPICAL VALUES:**

**NOTE: COMPLIES WITH SPECIFICATION DESCRIBED BY FOOD CHEMICAL CODEX 6TH ISSUE**

The typical values are based on the historical average of all analyses performed in our laboratories, and it may, however, vary from one sample to the other. This way, they shall not be interpreted as specifications or guarantee of analysis for any batch.

<b>Elements</b>	<b>Specifications</b>	<b>Typical Values</b>	<b>Method</b>
H3PO4 (%)	85,0 minimum	85,2	USP
P2O5 (%)	61,6 minimum	61,7	NBR9560/86
Density (g/cm <sup>3</sup> ) 25oC	1,685 minimum	1,687	ASTMD4052
APHA color	30 max.	20	NBR9846/87
As (ppm)	1 max.	0,5	NBR9946/87
F (ppm)	10 max.	9	NBR8906/90
Fe (ppm)	25 max.	20	FB-02/00
Heavy Metals (ppm)	10 max.	< 10	NBR12938/93
SO4 (ppm)	400 max.	250	FB-01/00
Cl (ppm)	20 max.	< 20	FB-03/00
Pb (ppm)	1 max.	< 1	ICP - VARIAN
Al (ppm)		< 5	ICP - VARIAN
Ba (ppm)		< 1	ICP - VARIAN
Ca (ppm)		< 3	ICP - VARIAN
Cd (ppm)		< 1	ICP - VARIAN
Co (ppm)		< 2	ICP - VARIAN
Cr (ppm)		< 2	ICP - VARIAN
Cu (ppm)		< 1	ICP - VARIAN
Hg (ppm)		< 0,01	ICP - VARIAN
Mg (ppm)		< 5	ICP - VARIAN
Mn (ppm)		< 1	ICP - VARIAN
Mo (ppm)		< 5	ICP - VARIAN
Ni (ppm)		< 2	ICP - VARIAN
Ti (ppm)		< 20	ICP - VARIAN
V (ppm)		< 2	ICP - VARIAN
Zn (ppm)		< 15	ICP - VARIAN