TECHNICAL GUIDE FOR AGRICULTURAL USE
PHOSPHORIC ACID LIQUID 20% (pH 1)

For soil pH correction, phosphorus nutrition, and irrigation system maintenance

1. PRODUCT CHARACTERISTICS

- Common name: Phosphoric Acid (liquid)
- Concentration: 20% (P_2O_5)
- pH: ~1
- Physical state: liquid
- Solubility: Fully soluble in water
- Compatibility: Not compatible with products containing calcium, magnesium, or alkaline substances

2. AGRICULTURAL USES AND OBJECTIVES

- Soil pH correction: Lower soil pH in alkaline soils (>7.5)
- Fertigation (nutrition): Provide soluble phosphorus to crops
- Fertigation (maintenance): Prevent and clean mineral buildup in irrigation systems
- Foliar application: Rapid correction of phosphorus deficiencies in critical growth stages

3. SOIL APPLICATION – pH CORRECTION AND NUTRITION

Considerations:
- Apply in soils with pH > 7.5
- Do not apply in acidic soils (pH < 6) without prior liming

Recommended doses per hectare:

- Sandy soil (pH > 7.5): 10 – 20 L/ha every 15–20 days
- Loam soil (pH > 7.5): 20 – 30 L/ha every 20–30 days
- Clay soil (pH > 7.5): 30 – 40 L/ha every 30 days
- Acidic soils (pH < 6): Not recommended unless corrected with lime

4. FERTIGATION – NUTRITION AND SYSTEM MAINTENANCE

- Irrigation system maintenance:
  Dose: 1 – 3 L/1,000 L of water. Frequency: every 15 – 30 days.
  Apply at the end of the irrigation cycle. Flush with clean water afterward.

- Phosphorus nutrition:
  Dose: 5 – 10 L/ha. Frequency: depends on crop growth stage.
  Do not mix with calcium-based products or pH > 7.

5. FOLIAR APPLICATION – DEFICIENCY CORRECTION

- Concentration: 0.25 – 0.5% (250 – 500 mL/100 L)
- Frequency: every 15 – 20 days
- Spray volume: 400 – 600 L/ha
- Recommendation: apply during cool hours, perform a prior small-area test

6. SAFETY AND HANDLING

- Use protective gloves, goggles, and clothing
- In case of skin or eye contact, rinse with plenty of water for at least 15 minutes
- Do not store near alkaline products
- Keep out of reach of children and animals