

1. Application	Food industry	acidity regulator, clearing agent
2. Physicochemical properties – based on technical literature	Molecular weight	98,00 g/mol
	Form and colour	clear, colourless or slightly green, viscous liquid
	Odour	odourless / sometimes perceptible H ₂ S
	Taste	sour
	Freezing point of 75% orthophosphoric acid H₃PO₄	- 17,5 °C
	Freezing point of 85% orthophosphoric acid H₃PO₄	+ 21 °C
	Solubility in water	unlimited

3. Quality requirements

Requirements		Guaranteed parameters		Analytical method
		75	85	
Phosphoric acid as H ₃ PO ₄	%(m/m), min	75	85	acid-base titration acc. to ZN-2000/Z.Ch."Alwernia" SA-1
Arsenic compounds as As,	mg · kg, max ⁻¹	1		colorimetric acc. to ZN-2000/Z.Ch."Alwernia" SA-1
Lead compounds as Pb,	mg · kg, max ⁻¹	1		emission atomic spectroscopy ICP acc. to PA/LJ/48
Mercury compounds as Hg,	mg · kg, max ⁻¹	0,01		ASA with direct mineralisation acc. to PA/LJ/57
Cadmium compounds as Cd,	mg · kg, max ⁻¹	0,1		emission atomic spectroscopy ICP acc. to PA/LJ/48
Fluorine compounds as F,	mg · kg, max ⁻¹	5		potentiometric ISE acc. to PA/LJ/76
Chlorine compounds as Cl ⁻ ,	mg · kg, max ⁻¹	10		nephelometric acc. to PA/LJ/62
Sulfur compounds as CaSO ₄ ,	mg · kg, max ⁻¹	70		emission atomic spectroscopy ICP acc. to PA/LJ/47
Nitrates as NaNO ₃ ,	mg · kg, max ⁻¹	5		quality test acc. to PA/LJ/80
Volatile acids as CH ₃ COOH,	mg · kg, max ⁻¹	10		steam distillation acc. to PA/LJ/79

4. Packaging Acid-proof tanker trucks, acid-proof railway tank wagons, polyethylene containers. The packaging for phosphoric acid must be certified to UN standards, meet legal requirements for group III packaging and legal requirements defined for materials and products intended for contact with food.

5. Transportation Phosphoric acid food grade should be transported in acid-proof tankers or unit packages permitted for transportation according to ADR and RID regulations on the transportation of hazardous materials.

Class – 8 Packaging group – III UN – 1805 Hazard ID number – 80

6. Storage Phosphoric acid food grade should be stored in acid-resistant steel containers placed on an acid-proof tray in the open air. Smaller quantities of the acid may be stored in the transportation packaging in ventilated rooms or in the open air.