



**Extract from  
„The Specialists  
for Pectin“**

**Purity Requirements of Pectins**

# PURITY REQUIREMENTS OF PECTINS

International Specification	EU E 440 (i) Pectin	EU E 440 (ii) amidated Pectin	FAO/WHO JECFA Pectins	FDA/FCC Pectins	USP Pectin
1. Loss on drying	max. 12 %	max. 12 %	max. 12 %	max. 12.0 %	max. 10.0 %
2. Acid-insoluble ash (in approx. 3N HCl)	max. 1 %	max. 1 %	max. 1 %	max. 1.0 %	–
3. Total insolubles	max. 3 %	max. 3 %	max. 3 %	max. 3.0 %	–
4. Sodium methyl sulfate	–	–	–	max. 0.1 %	–
5. Free methyl, ethyl, isopropyl alcohol	max. 1 %	max. 1 %	max. 1 %	max. 1.0 %	max. 1 %
	on the volatile matter-free basis				
6. Sulphur dioxide	max. 50 ppm	max. 50 ppm	max. 50 ppm	max. 50 ppm	max. 50 ppm
	on the anhydrous basis				
7. Nitrogen content (pectins) (after washing with acid and ethanol)	max. 1.0 %	–	max. 2.5 %	–	–
8. Nitrogen content (amidated pectins) (after washing with acid and ethanol)	–	max. 2.5 %	max. 2.5 %	–	–
9. Galacturonic acid (on ash-free and anhydrous basis)	min. 65 %	min. 65 %	min. 65 %	min. 65.0 %	min. 74.0 %
10. Degree of amidation (amidated pectins)	–	max. 25 %	max. 25 %	max. 25 %	–
11. Sugar and organic acids	–	–	–	–	max. 16 %
12. Arsenic	max. 3 ppm	max. 3 ppm	–	–	max. 3 ppm
13. Lead	max. 5 ppm	max. 5 ppm	max. 2 ppm 0.5 ppm for use in infant formula	max. 5 ppm	max. 5 ppm
14. Cadmium	max. 1 ppm	max. 1 ppm	–	–	–
15. Mercury	max. 1 ppm	max. 1 ppm	–	–	–
16. Total aerobic microbial count	–	–	–	–	max. 1.000 CFU/g
Yeasts and molds	–	–	–	–	max. 100 CFU/g
17. Pathogenous germs	according to general food regulations				
18. Pesticides	according to general food regulations				

– = no specifications

EU = European Union

FAO/WHO = Food & Agriculture Organization/World Health Org.

JECFA = Joint Expert Committee on Food Additives

USP = United States Pharmacopeia

FDA = Food and Drug Administration

FCC = Food Chemicals Codex



**Corporate Group**

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