



Herbstreith & Fox

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

**Regulations for Purity
Requirements of Pectins**

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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. 3 N 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- or isopropyl alcohol	max. 1% on the anhydrous basis	max. 1%	max. 1%	max. 1.0%	max. 1%
6. Sulphur dioxide	max. 50 ppm on the anhydrous basis	max. 50 ppm	max. 50 ppm	max. 50 ppm	max. 50 ppm
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 the ash-free and anhydrous basis)	min. 65 %	min. 65%	min. 65 %	min. 65.0%	min. 74.0%
10. Degree of amidation (amidated pectin)	–	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. 5 ppm	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 Organisation/World Health Org.

JECFA = Joint Expert Committee on Food Additives

USP = United States Pharmacopeia

FDA = Food and Drug Administration

FCC = Food Chemical Codex



Corporate Group

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