Bacterial contamination Spices vs. Their Extracts, source: Nenov, buy.e-xtracts.com, 2010

№	MICROORGANISMS	METHOD	Paprika sweet		Black pepper		Paprika hot		Pimento	
			Raw material	Extract	Raw material	Extract	Raw material	Extract	Raw material	Extract
			CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3
1	Mezophilic anaerobic and facultative anaerobic bacteria	EN ISO 4833:2004	**6x10^5**	**5x10^3**	**1.7x10^6**	**2.5x10^2**	**6x10^4**	**1x10^2**	**1x10^7**	**5x10^2**
2	Moulds	ISO 7954:2002	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	**2.1x10^3**	<10^1
3	Yeast	ISO 7954:2002	**2x10^4**	**1.2x10^2**	**2x10^3**	<10^1	**1x10^2**	<10^1	<10^1	<10^1
4	Escherichia coli	ISO 16649-2:2002	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
5	Salmonella	EN ISO 6579:2002	0	0	0	0	0	0	0	0
6	Coliforms	ISO 16649-2:2002	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
7	Other Enterobacteria	ISO 21258-2:2004	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
8	Enterococcus sp.	Slanetz and Bartley	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	**2x10^2**	<10^2
9	Coagulazo-positive stafilococks	EN ISO 6888-1:2005+A1:2005	**2x10^2**	<10^2	**1.3x10^3**	<10^2	**10^2**	<10^2	**5x10^3**	<10^2
10	Anaerobic sulphit-reducing bacteria/spores/	ISO 15213:2003	**7x10^1**	<10^1	**8x10^1**	<10^1	**7x10^1**	<10^2	<10^2	<10^1
11	Anaerobic sulphit-reducing bacteria/vegetative cells/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	**5x10^1**	<10^1
12	Other anaerobic bacteria /spores/	ISO 15213:2003	<10^1	**1x10^1**	**1x10^1**	**1x10^1**	**2x10^2**	<10^1	<10^1	<10^1
13	Other anaerobic bacteria/vegetative cells/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1

№	MICROORGANISMS	METHOD	Mint		Juniper		Savory		Chamomile		Marigold	
			Raw material	Extract	Raw material	Extract	Raw material	Extract	Raw material	Extract	Raw material	Extract
			CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3
1	Mezophilic anaerobic and facultative anaerobic bacteria	EN ISO 4833:2004	**1x10^5**	<10^1	**2.8x10^2**	**2.5x10^2**	**3.4x10^3**	<10^1	**2x10^5**	<10^1	**1x10^5**	<10^1
2	Moulds	ISO 7954:2002	**1.4x10^2**	<10^1	**2x10^1**	<10^1	**2x10^1**	<10^1	**1.2x10^2**	<10^1	**4x10^1**	<10^1
3	Yeast	ISO 7954:2002	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
4	Escherichia coli	ISO 16649-2:2002	**1.8x10^4**	<10^2	<10^2	<10^2	<10^2	<10^2	**6x10^4**	<10^2	<10^2	<10^2
5	Salmonella	EN ISO 6579:2002	0	0	0	0	0	0	0	0	0	<10^2
6	Coliforms	ISO 16649-2:2002	**2x10^5**	<10^2	<10^2	<10^2	**4x10^2**	<10^2	**2x10^5**	<10^2	**2x10^2**	<10^2
7	Other Enterobacteria	ISO 21258-2:2004	**2x10^5**	<10^2	<10^2	<10^2	**8x10^2**	<10^2	**2x10^5**	<10^2	<10^2	<10^2
8	Enterococcus sp.	Slanetz and Bartley	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
9	Coagulazo-positive stafilococks	EN ISO 6888-1:2005+A1:2005	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	**5x10^3**	<10^2
10	Anaerobic sulphit-reducing bacteria/spores/	ISO 15213:2003	**1x10^2**	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	**1x10^3**	<10^1
11	Anaerobic sulphit-reducing bacteria/vegetative cells/	ISO 15213:2003	**4x10^2**	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	**4x10^4**	<10^1
12	Other anaerobic bacteria /spores/	ISO 15213:2003	**2x10^2**	<10^1	<10^1	<10^1	**2x10^2**	<10^1	<10^1	<10^1	<10^1	<10^1
13	Other anaerobic bacteria/vegetative cells/	ISO 15213:2003	**1x10^6**	<10^1	<10^1	<10^1	<10^1	<10^1	**1x10^6**	<10^1	<10^1	<10^1

№	MICROORGANISMS	METHOD	Thyme		Fennel		Basil		Nutmeg	
			Raw material	Extract	Raw material	Extract	Raw material	Extract	Raw material	Extract
			CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3
1	Mezophilic anaerobic and facultative anaerobic bacteria	EN ISO 4833:2004	**4x10^3**	<10^1	**3x10^3**	<10^1	**5x10^5**	<10^1	**2x10^3**	<10^1
2	Moulds	ISO 7954:2002	**1x10^2**	<10^1	**2x10^1**	<10^1	**2.8x10^2**	<10^1	**3x10^2**	<10^1
3	Yeast	ISO 7954:2002	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
4	Escherichia coli	ISO 16649-2:2002	<10^2	<10^2	<10^2	<10^2	**5.4x10^3**	<10^2	<10^2	<10^2
5	Salmonella	EN ISO 6579:2002	0	0	0	0	0	0	0	0
6	Coliforms	ISO 16649-2:2002	<10^2	<10^2	**2.9x10^2**	<10^2	**1x10^5**	<10^2	<10^2	<10^2
7	Other Enterobacteria	ISO 21258-2:2004	**3x10^3**	<10^2	**1x10^1**	<10^2	**2x10^5**	<10^2	<10^2	<10^2
8	Enterococcus sp.	Slanetz and Bartley	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
9	Coagulazo-positive stafilococks	EN ISO 6888-1:2005+A1:2005	<10^2	<10^2	<10^2	<10^2	**2x10^4**	<10^2	<10^2	<10^2
10	Anaerobic sulphit-reducing bacteria/spores/	ISO 15213:2003	**1x10^3**	<10^1	**2x10^1**	<10^1	**6x10^2**	<10^1	<10^1	<10^1
11	Anaerobic sulphit-reducing bacteria/vegetative cells/	ISO 15213:2003	**8x10^2**	<10^1	**4x10^2**	<10^1	**1x10^3**	<10^1	<10^1	<10^1
12	Other anaerobic bacteria /spores/	ISO 15213:2003	**4x10^1**	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
13	Other anaerobic bacteria/vegetative cells/	ISO 15213:2003	**2x10^3**	<10^1	**2x10^3**	<10^1	**1x10^5**	<10^1	<10^1	<10^1

№	MICROORGANISMS	METHOD	Cinnamon		Clove bud		Cumin		Cardamom	
			Raw material	Extract	Raw material	Extract	Raw material	Extract	Raw material	Extract
			CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3	CFU/g	CFU/cm^3
1	Mezophilic anaerobic and facultative anaerobic bacteria	EN ISO 4833:2004	**3.1x10^3**	**8x10^2**	**1x10^2**	0	**1.25x10^3**	**1x10^1**	**2.5x10^3**	<10^1
2	Moulds	ISO 7954:2002	**9x10^2**	<10^1	<10^1	<10^1	**3x10^1**	<10^1	**1x10^1**	<10^1
3	Yeast	ISO 7954:2002	**1x10^3**	**4.3x10^2**	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
4	Escherichia coli	ISO 16649-2:2002	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
5	Salmonella	EN ISO 6579:2002	0	0	0	0	0	0	0	0
6	Coliforms	ISO 16649-2:2002	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
7	Other Enterobacteria	ISO 21258-2:2004	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
8	Enterococcus sp.	Slanetz and Bartley	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
9	Coagulazo-positive stafilococks	EN ISO 6888-1:2005+A1:2005	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2	<10^2
10	Anaerobic sulphit-reducing bacteria/spores/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
11	Anaerobic sulphit-reducing bacteria/vegetative cells/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
12	Other anaerobic bacteria /spores/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1
13	Other anaerobic bacteria/vegetative cells/	ISO 15213:2003	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1	<10^1