

COMPLIANCE OF THE ORGANIC PRODUCTION OF SEA SALT AND OTHER SALTS FOR FOOD AND FEED WITH THE OBJECTIVES AND GENERAL PRINCIPLES OF REGULATION (EU) 2018/848

Sea salt – Risks of contamination and required provisions for organic production

Possible contamination	Source	Literature	Required provisions for organic production
Microplastics	Polluted seawater	[1]	<p>WATER:</p> <ul style="list-style-type: none"> - The production of sea salt is considered as organic production provided that the production areas are suitable from health point of view and are of high ecological status as defined by Directive 2000/60/EC. [<i>Water Framework Directive</i>] - The production of sea salt is considered as organic production provided that the seawater quality corresponds to clean seawater according to Article 2(1)(h) of Regulation (EC) 852/2004.
PFAS	Polluted seawater	[2] [3]	
Pesticides	Polluted seawater	[4]	
Nutrients	Polluted seawater	[5]	
Mineral oil	Polluted seawater (ships)		
Bacteria and fungi	<ul style="list-style-type: none"> - Polluted seawater, - Soil in ponds, - Bird colonies. <p>(Sea salt is a typical source of <i>Clostridium oceanicum</i> which may infect salt baths and provoke proteolysis on the surface of film-matured cheeses, causing white taints on the cheese surface accompanied by an intense odor).</p>	[5] [8] [9] [10] [11] [12]	<p>COMPOSITION:</p> <ul style="list-style-type: none"> - Microbial contaminants may not be present in sea salt at levels higher than the following maximum levels: <ul style="list-style-type: none"> Number of colonies of halophile germs / 1 g <100 Number of colonies of sulfite-reducing spore-forming anaerobes / 10 g absence Number of colonies of fecal coliform / 10 g absence Number of colonies of total coliform / 10 g absence Number of colonies of aerobic mesophilic bacteria / 10 g <100 Number of spores of aerobic flora mesophile / 10 g <100 Yeast / 10 g absence Mould / 10 g absence Number of colonies of salmonella / 25 g absence Number of colonies of staphylococcus aureus / 10 g absence Number of colonies of fecal streptococci / 10 g absence Number of colonies of listeria / 25 g absence
Lead	Duck hunting in salt marshes	[6] [7]	<p>PRODUCTION TECHNIQUES:</p> <ul style="list-style-type: none"> - Hunting in areas with ponds for sea salt and solar salt production is prohibited.
Physical (wood splinters, broken glass, etc.) and chemical contaminants	<ul style="list-style-type: none"> - Wooden tools - Open access to production ponds (missing Food Defense) 	[13] [14] [15]	<p>PRODUCTION TECHNIQUES:</p> <ul style="list-style-type: none"> - Harvest of sea salt, solar salt and pan salt with wooden tools is prohibited. <p>LOCATION:</p> <ul style="list-style-type: none"> - Access to operations, including areas with open seawater ponds, shall not be uncontrolled.

Literature

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- [12] Portaria no. 72/2008, Diário da República 1.ª Serie-N.º 16-23 de Janeiro de 2008 (Portugal)
- [13] ISO/TS 22002-1 (Prerequisite programmes on food safety - Part 1: Food manufacturing)
- [14] FSSC (Food Safety System Certification)
- [15] IFS Food V7 (International Featured Standard)