

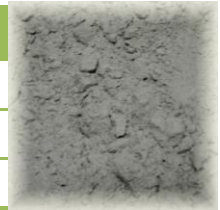


*Specialty Malts that Make Your Beer So Special*

Product technical specification data sheet

**LIQUORICE SWEET ROOT POWDER**

Product general characteristics	
<b>Name</b>	LIQUORICE SWEET ROOT
<b>Latin name</b>	Glycyrrhiza glabra L. (Fabaceae)
<b>Part of the plant used</b>	Peels: LIQUIRITIAE radix
Product detailed description	
<b>Main components</b>	<ul style="list-style-type: none"> <li>- 2 to 15 % triterpene saponins: mainly glycyrrhizin (or glycyrrhizic acid, producing by hydrolysis glycyrrhetic acid and 2 molecules of glucuronic acid), grabolide, glycyrrhetol, ...</li> <li>- flavonoids and isoflavonoids: liquiritoside and isoliquiritoside (majority), licuroside, neolicuroside, ..., and their aglucones</li> <li>- triterpenes (<math>\beta</math>-amyrin, onocerin,...)</li> <li>- steroids: sterols (sitosterol, stigmasterol, ...)</li> <li>- coumarins (umbelliferone, herniarin, ...)</li> <li>- traces of essential oil</li> <li>- 20 to 30 % starch and carbohydrates (glucose, saccharose)</li> </ul>
<b>Properties</b>	Sharp anise-like flavour, sweet, smooth taste, improves head retention
<b>Usage</b>	Porters, stouts, heavy beers
<b>Produced by</b>	Fagron NV, Belgium
<b>Country of origin</b>	Cf certificate
<b>Best use before</b>	Cf label
<b>Main storage conditions (T°, ...)</b>	Shielded from light and moisture
Information on label	
<b>Sales Name</b>	Yes
<b>List of ingredients</b>	No
<b>Ingredients quantities or categories (expressed as percentage)</b>	No
<b>Nett quantity</b>	Yes
<b>Date of minimum durability</b>	Yes
<b>Specific storage conditions or use</b>	Yes
<b>Manufacturer name and address</b>	Yes



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Information on label	
Origin	No
Instructions for use	No
Alcoholic titration	No
Identification (batch nr.)	Yes
Transport conditions (T°, ...)	Transport at room temperature, shielded from light and moisture
Identification	
Macroscopic characteristics	Eur.Ph. - A
Microscopic characteristics	Eur.Ph. - B
Thin layer chromatography	Eur.Ph. - C
Microbiological characteristics (analysis only on specific request)	
Aerobic mesophilic	< 50.000.000 /g
Yeast / mould	< 500.000 /g
Escherichia coli	< 500 /g
Assay	
Foreign elements	Max 2 %
Loss on drying	Max 10 %
Total ash	Max. 6 %
Ash insoluble in hydrochloric acid	Max. 0,5 %
Dosage	
Glycyrrhizic acid	Max. 5,0 %
Allergens	
	+ indicates presence of the substance or material - indicates total absence of the substance or material ? indicates no certainty of absence of the substance or material
Gluten	-
Crustaceans	-
Peanuts	-
Soybean	-

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Allergens	
Milk	-
Almonds	-
Mustard	-
Lupine	-
Hazelnuts	-
Nuts	-
Eggs	-
Pistachios	-
Fish	-
Celery	-
Sesame seeds	-
Shellfish	-
Sulphur dioxide and sulphites with concentrations exceeding 10 mg/kg or 10 mg/litre expressed as SO2 (E220-E227)	-
Quality settings	
Quality assurance	<ul style="list-style-type: none"> <li>• A quality policy has been defined and written.</li> <li>• A quality manual / documentation system has been defined into the company in order to insure the quality of our products. It is based on the IFS (International Food Standard) repository.</li> <li>• With a repository used in the food sector, our quality manual includes in particular a HACCP evaluation of our products.</li> <li>• Analyses are realised on the commercialised products. We have an internal laboratory to realize these analyses.</li> </ul>
Traceability	<ul style="list-style-type: none"> <li>• Traceability is insured from the reception of the product to the delivery to our customer.</li> <li>• A withdrawal process of our products has also been defined in case of problem.</li> </ul>

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