

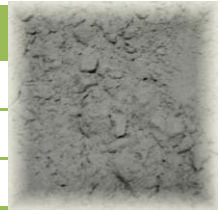


Specialty Malts that Make Your Beer So Special

Product technical specification data sheet

LIQUORICE SWEET ROOT POWDER

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

| 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"> • A quality policy has been defined and written. • 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. • With a repository used in the food sector, our quality manual includes in particular a HACCP evaluation of our products. • Analyses are realised on the commercialised products. We have an internal laboratory to realize these analyses. |
| Traceability | <ul style="list-style-type: none"> • Traceability is insured from the reception of the product to the delivery to our customer. • A withdrawal process of our products has also been defined in case of problem. |

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