żytnie Grodzie

- Gravity **7.9 BLG**
- ABV **---**
- IBU **32**
- SRM **5**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **1 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **7.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **47.7C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **10 min** at **73C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	2 kg *(71.4%)*	80 %	4
Grain	Strzegom Pilzneński	0.7 kg *(25%)*	80 %	4
Grain	Karmelowy żytni Strzegom	0.1 kg *(3.6%)*	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	15 g	30 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Liquid	20 ml	Fermentum Mobile

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.