Grodziski Lichtenhainer

- Gravity **11 BLG**
- ABV **---**
- IBU **35**
- SRM **4.3**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **42 C**, Time **1440 min**
- Temp **65 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **45.7C**
- Add grains
- Keep mash **1440 min** at **42C**
- Keep mash **60 min** at **64C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **71C**
- Keep mash **5 min** at **77C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2 kg *(40%)*	80 %	3
Grain	Weyermann - Smoked Malt	2 kg *(40%)*	81 %	6
Grain	Weyermann - Acidulated Malt	1 kg *(20%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	90 min	10 %
Boil	Marynka	20 g	20 min	10 %

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