#134 Grodziskie

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **23**
- SRM **2.8**
- Style **Grodziskie**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **3 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **67 min**
- Evaporation rate **14 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **28.7 liter(s)**

Steps

- Temp **67 C**, Time **37 min**
- Temp **72 C**, Time **25 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **24.6 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **37 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2.5 kg *(61%)*	80 %	3
Grain	Słód Wędzony Steinbach	1.4 kg *(34.1%)*	80 %	5
Grain	Weyermann - Carapils	0.2 kg *(4.9%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga PL	7 g	55 min	10 %
Boil	Iunga PL	10 g	30 min	10 %
Aroma (end of boil)	Izabela	25 g	6 min	7 %
Aroma (end of boil)	Iunga PL	8 g	6 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

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

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloct	2.5 g	Boil	12 min
Other	A) Mix Brett Lochristi i Trois Vrei	5 g	Secondary	60 day(s)
Spice	B) Kebab	2 g	Secondary	14 day(s)
Spice	B) Gyros	2 g	Secondary	14 day(s)
Spice	B) Czosnek granulowany	1 g	Secondary	14 day(s)
Spice	B) Papryka ostra	0.5 g	Secondary	14 day(s)
Flavor	C) Suska sechlońska	250 g	Secondary	14 day(s)
Herb	C) Kaffir	14 g	Secondary	14 day(s)
Herb	C) Mięta pieprzowa	3.2 g	Secondary	14 day(s)
Herb	C) Lawenda	2 g	Secondary	14 day(s)
Other	D) NIC	0.1 g	Bottling	---