

GRODZISKA APA II 12,5 BLG #73

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **4.9**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (73.2%)	81 %	4
Grain	Pszeniczny	0.5 kg (12.2%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.3 kg (7.3%)	75 %	30
Grain	Monachijski	0.3 kg (7.3%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	40 g	60 min	4.6 %
Boil	Zula PH	30 g	10 min	8.3 %
Dry Hop	EXP 2/20 PH	30 g	4 day(s)	8.1 %
Dry Hop	Amora Preta PH	30 g	4 day(s)	9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis