

# GRODZISKA APA 12,5 BLG # 72

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **4.7**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **14.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 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 **8.4 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 **8.8 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (71.4%)	81 %	4
Grain	Pszeniczny	0.5 kg (17.9%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.15 kg (5.4%)	75 %	30
Grain	Monachijski	0.15 kg (5.4%)	--- %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amora Preta PH	15 g	60 min	9 %
Boil	EXP 2/20 PH	15 g	10 min	8.1 %
Dry Hop	Zula PH	30 g	4 day(s)	8.3 %
Dry Hop	Cascade PL	30 g	4 day(s)	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis