

## 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  |