

## #49 Grodzisz po raz drugi

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **18**
- SRM **2.4**
- Style **Grodziskie**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **11.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3.5 kg (92.1%) | 80 %  | 3   |
| Grain | Weyermann - Carapils               | 0.3 kg (7.9%)  | 78 %  | 4   |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | East Kent Goldings | 30 g   | 60 min | 5.1 %      |
| Aroma (end of boil) | East Kent Goldings | 20 g   | 1 min  | 5.1 %      |

### Yeasts

| Name | Type | Form  | Amount | Laboratory |
|------|------|-------|--------|------------|
| FM52 | Ale  | Slant | 150 ml | ---        |

### Extras

| Type   | Name                  | Amount | Use for | Time  |
|--------|-----------------------|--------|---------|-------|
| Fining | whirlfloc - pół tabsa | 1 g    | Boil    | 5 min |