

## #24 Grodziskie (olcha)

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- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **23**
- SRM **4.6**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount      | Yield | EBC |
|-------|------------------------------|-------------|-------|-----|
| Grain | wędzony olchą<br>Viking Malt | 3 kg (100%) | 82 %  | 10  |

### Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Saaz (Czech Republic) | 20 g   | 60 min | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 30 g   | 15 min | 4.5 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | ---        |