

## #119 Grodziskie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **36**
- SRM **3.7**
- Style **Grodziskie**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Wędzony bukiem Viking Malt | 2 kg (62.5%)   | 82 %  | 10  |
| Grain | Malteurop Pale Ale         | 1.2 kg (37.5%) | 82 %  | 6   |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 20 g   | 60 min | 12.7 %     |
| Boil    | Iunga  | 20 g   | 10 min | 10.3 %     |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale  | Slant | 200 ml | ---        |