

## #43 Grodziskie

- Gravity **7.6 BLG**
- ABV ---
- IBU **21**
- SRM **2.6**
- Style **Grodziskie**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

### Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Wędzony bestmalz                   | 1.3 kg (43.3%) | 77 %  | 5   |
| Grain | Pszeniczny                         | 0.8 kg (26.7%) | 85 %  | 4   |
| Grain | Grodziski jęczmienny wędzony dębem | 0.5 kg (16.7%) | 80 %  | 3   |
| Grain | Pilznieński                        | 0.4 kg (13.3%) | 81 %  | 4   |

### Hops

| Use for             | Name  | Amount | Time   | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil                | Lomik | 30 g   | 60 min | 3.8 %      |
| Aroma (end of boil) | Lomik | 20 g   | 20 min | 3.8 %      |

### Yeasts

| Name               | Type | Form   | Amount | Laboratory |
|--------------------|------|--------|--------|------------|
| Z piwa z Grodziska | Ale  | Liquid | 700 ml | ---        |