

## grodziskie 23

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- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **26**
- SRM **3.7**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **15.5 liter(s)**

### Steps

- Temp **62 C**, Time **25 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.4 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **25 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Wędzony dębem   | 2.5 kg (80.6%) | 82 %  | 10  |
| Grain | Słód Wędzony Steinbach | 0.5 kg (16.1%) | 80 %  | 5   |
| Grain | łuska                  | 0.1 kg (3.2%)  | --- % | --- |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 50 g   | 60 min | 4 %        |
| Boil    | Lublin (Lubelski) | 20 g   | 10 min | 4 %        |