

LEM | Grodziskie

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **12**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **7.5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.56 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **46 C**, Time **10 min**
- Temp **53 C**, Time **15 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **10 min**
- Temp **79 C**, Time **0 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **49.7C**
- Add grains
- Keep mash **10 min** at **46C**
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **63C**
- Keep mash **10 min** at **73C**
- Keep mash **0 min** at **79C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3 kg (66.7%) | 80 % | 3 |
| Grain | Viking Pilsner malt | 1.5 kg (33.3%) | 82 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 20 g | 55 min | 4 % |
| Boil | Lublin (Lubelski) | 10 g | 25 min | 4 % |
| Boil | Lublin (Lubelski) | 5 g | 5 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|---------|------------|
| Safbrew S-33 | Ale | Dry | 12.65 g | Safbrew |