

Growar v2

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **26**
- SRM **3.2**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

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

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 2.5 kg (69.4%) | 80 % | 3 |
| Grain | Viking Malt Wędzony Czereśnią | 1 kg (27.8%) | 82 % | 10 |
| Grain | Peat Smoked Malt | 0.1 kg (2.8%) | 74 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| First Wort | Puławski | 20 g | 60 min | 7.7 % |
| Boil | Puławski | 10 g | 15 min | 7.7 % |
| Aroma (end of boil) | Puławski | 10 g | 1 min | 7.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|--------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Liquid | 100 ml | Fermentum Mobile |