

Grodziskie V4

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **21**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **38 C**, Time **50 min**
- Temp **51 C**, Time **20 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **50 min** at **38C**
- Keep mash **20 min** at **51C**
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **72C**
- Sparge using **20.4 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 kg (66.7%) | 80 % | 3 |
| Grain | Weyermann - Grodziski | 1 kg (33.3%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Lomik | 25 g | 60 min | 4.6 % |
| Boil | Lomik | 15 g | 20 min | 4.6 % |
| Boil | Lomik | 10 g | 5 min | 4.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| S-33 | Wheat | Dry | 11.5 g | Fermentis |