

Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **44**
- SRM **3.2**
- Style **Grodziskie**

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 **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **38 C**, Time **20 min**
- Temp **52 C**, Time **60 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **20 min** at **38C**
- Keep mash **60 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|---------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3.5 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------------|--------|--------|------------|
| Boil | Tomyski | 70 g | 60 min | 4.5 % |
| Boil | Mech irlandzki | 5 g | 10 min | 1 % |
| Whirlpool | Tomyski na 70*C | 30 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 22 g | Fermentis |