

#41 Grodziskie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **23**
- SRM **2.2**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **38.5 liter(s)**

Steps

- Temp **45 C**, Time **0 min**
- Temp **52 C**, Time **15 min**
- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **31.5 liter(s)** of strike water to **47.8C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **15 min** at **52C**
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **38.8 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|-------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 7 kg (100%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 25 g | 60 min | 13.5 % |
| Boil | Magnum | 5 g | 30 min | 13.5 % |
| Boil | Lomik | 30 g | 10 min | 4.5 % |
| Boil | Lomik | 20 g | 0 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 11.5 g | Fermentis |
| Safale K-97 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------------|--------|-----------|----------|
| Water Agent | Gips piwowarski | 4 g | Mash | 90 min |
| Water Agent | xxx | 5 g | Mash | 90 min |
| Water Agent | Sól epsom | 11 g | Mash | 90 min |
| Fining | Whirfloc | 4 g | Boil | 15 min |
| Flavor | Śliwka wędzona | 250 g | Boil | 15 min |
| Flavor | Śliwka suszona | 100 g | Boil | 15 min |
| Fining | Żelatyna spożywcza | 20 g | Secondary | 3 day(s) |