

Grodziskie

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **17**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**
- Temp **52 C**, Time **25 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **25 min** at **52C**
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|--------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 1.5 kg (50%) | 80 % | 3 |
| Grain | Pszeniczny | 1.5 kg (50%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Sybilla | 15 g | 60 min | 3.5 % |
| Boil | Lublin (Lubelski) | 15 g | 40 min | 4 % |
| Boil | Lublin (Lubelski) | 15 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|--------|--------|------------|
| fm 51 | Ale | Liquid | 60 ml | --- |