

Zapiski na Grodziski

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **23**
- SRM **4.1**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **52.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **38 C**, Time **45 min**
- Temp **63 C**, Time **21 min**
- Temp **72 C**, Time **22 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **45 min** at **38C**
- Keep mash **21 min** at **63C**
- Keep mash **22 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **40.3 liter(s)** of **76C** water or to achieve **52.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Słód pszeniczny wędzony dębem | 5 kg (84.7%) | 80 % | 9 |
| Grain | Słód pszeniczny ciemny Niemcy | 0.4 kg (6.8%) | 80 % | 18 |
| Grain | Prażona pszenica | 0.5 kg (8.5%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 50 min | 4 % |
| Boil | Marynka | 30 g | 20 min | 10 % |
| Boil | Lublin (Lubelski) | 20 g | 20 min | 4 % |
| Aroma (end of boil) | Marynka | 20 g | 1 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|------|------|--------|------------|
| Fermentis S-33 | Ale | Dry | 11 g | Fermentis |