

# Grodziskie

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **13**
- SRM **2.4**
- Style **Grodziskie/Graetzer**

## 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **8.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Pszoniczny                         | 1.4 kg (48.3%) | 85 %  | 4   |
| Grain | Grodziski pszoniczny wędzony dębem | 1 kg (34.5%)   | 80 %  | 3   |
| Grain | Pilznerski                         | 0.5 kg (17.2%) | 81 %  | 4   |

## Hops

| Use for   | Name  | Amount | Time   | Alpha acid |
|-----------|-------|--------|--------|------------|
| Boil      | Lomik | 15 g   | 60 min | 3.8 %      |
| Boil      | Lomik | 15 g   | 30 min | 3.8 %      |
| Whirlpool | Lomik | 20 g   | 0 min  | 3.8 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale  | Dry  | 11.5 g | Safbrew    |

## Notes

- Gotowanie 60 minut
- Żelatyna do sklarowania

*Jun 5, 2017, 1:33 PM*