

# Grodziskie

---

- Gravity **7.8 BLG**
- ABV ---
- IBU **33**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **15 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **30.2 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount      | Yield | EBC |
|-------|--------------------|-------------|-------|-----|
| Grain | pszeniczny wędzony | 3 kg (100%) | 80 %  | 5   |

## Hops

| Use for   | Name  | Amount | Time   | Alpha acid |
|-----------|-------|--------|--------|------------|
| Boil      | lunga | 20 g   | 60 min | 11.2 %     |
| Boil      | lunga | 10 g   | 10 min | 11.2 %     |
| Whirlpool | lunga | 20 g   | 0 min  | 11.2 %     |

## Yeasts

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

## Notes

- Złoże filtracyjne ułożone z 50g szyszek Magnum.  
*Apr 14, 2016, 12:45 PM*