

# Grodziskie

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- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **44**
- SRM **3.2**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **38 C**, Time **20 min**
- Temp **52 C**, Time **60 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **20 min** at **38C**
- Keep mash **60 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount        | Yield | EBC |
|-------|------------------------------------|---------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3.5 kg (100%) | 80 %  | 5   |

## Hops

| Use for   | Name            | Amount | Time   | Alpha acid |
|-----------|-----------------|--------|--------|------------|
| Boil      | Tomyski         | 70 g   | 60 min | 4.5 %      |
| Boil      | Mech irlandzki  | 5 g    | 10 min | 1 %        |
| Whirlpool | Tomyski na 70*C | 30 g   | 15 min | 4.5 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 22 g   | Fermentis  |