

# Grodzii

- Gravity **13.3 BLG**
- ABV ---
- IBU **24**
- SRM **4.4**
- Style **Grodziskie**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **50 min**
- Temp **67 C**, Time **10 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **67C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Słód pszeniczny Bestmalz           | 1.5 kg (50%)   | 82 %  | 5   |
| Grain | Grodziski pszeniczny wędzony dębem | 1 kg (33.3%)   | 80 %  | 3   |
| Grain | Pilznieński                        | 0.5 kg (16.7%) | 81 %  | 4   |

## Hops

| Use for             | Name                  | Amount | Time     | Alpha acid |
|---------------------|-----------------------|--------|----------|------------|
| Boil                | Saaz (USA)            | 15 g   | 60 min   | 3.75 %     |
| Boil                | Saaz (Czech Republic) | 10 g   | 30 min   | 4.5 %      |
| Aroma (end of boil) | Saaz (Czech Republic) | 10 g   | 10 min   | 4.5 %      |
| Aroma (end of boil) | Citra                 | 5 g    | 10 min   | 12 %       |
| Dry Hop             | Citra                 | 5 g    | 4 day(s) | 12 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                |       |     |        |     |
|----------------|-------|-----|--------|-----|
| Fermentis S-33 | Wheat | Dry | 11.5 g | --- |
|----------------|-------|-----|--------|-----|