

# Grodziskie

- Gravity **7.3 BLG**
- ABV ---
- IBU **21**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **54.7 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **71 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **71C**
- Keep mash **5 min** at **76C**
- Sparge using **39.7 liter(s)** of **76C** water or to achieve **54.7 liter(s)** of wort

## Fermentables

| Type    | Name                  | Amount        | Yield | EBC |
|---------|-----------------------|---------------|-------|-----|
| Grain   | Weyermann - Grodziski | 5 kg (75.8%)  | 80 %  | 4   |
| Grain   | Viking Pale Ale malt  | 1 kg (15.2%)  | 80 %  | 5   |
| Adjunct | Rice Hulls            | 0.6 kg (9.1%) | 1 %   | 0   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Lomik             | 30 g   | 60 min | 3.8 %      |
| Boil                | Lublin (Lubelski) | 30 g   | 60 min | 4 %        |
| Boil                | Styrian Golding   | 5 g    | 40 min | 5 %        |
| Aroma (end of boil) | Lomik             | 20 g   | 15 min | 3.8 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g   | 15 min | 4 %        |

## Yeasts

| Name                | Type  | Form   | Amount | Laboratory       |
|---------------------|-------|--------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Liquid | 300 ml | Fermentum Mobile |