

# Grodziskie

- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **20**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **15 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **11.2 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **11.2 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **71C**
- Keep mash **5 min** at **77C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

| Type  | Name                    | Amount         | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | pszeniczny wędzony      | 2 kg (71.4%)   | 80 %  | 5   |
| Grain | Weyermann - Smoked Malt | 0.2 kg (7.1%)  | 81 %  | 6   |
| Grain | Briess - Carapils Malt  | 0.1 kg (3.6%)  | 74 %  | 2   |
| Grain | Pszeniczny              | 0.5 kg (17.9%) | 85 %  | 4   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 10 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 30 g   | 5 min  | 4 %        |
| Boil    | Marynka           | 20 g   | 5 min  | 10 %       |

## Yeasts

| Name                | Type | Form   | Amount | Laboratory       |
|---------------------|------|--------|--------|------------------|
| FM51 Grodzie dębowe | Ale  | Liquid | 10 ml  | Fermentum Mobile |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 4 g    | Boil    | 15 min |