

# Grodziskie #1

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **14**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.1 liter(s)**
- Total mash volume **6.8 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **71 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **5.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **71C**
- Keep mash **5 min** at **76C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount          | Yield | EBC |
|-------|------------------------------------|-----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 1.25 kg (73.5%) | 80 %  | 3   |
| Grain | Strzegom Pilzneński                | 0.45 kg (26.5%) | 80 %  | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Tomyski | 15 g   | 60 min | 2.8 %      |
| Boil    | Tomyski | 20 g   | 5 min  | 2.8 %      |

## Yeasts

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

## Extras

| Type  | Name                       | Amount | Use for | Time |
|-------|----------------------------|--------|---------|------|
| Other | Łuska ryżowa sterylizowana | 100 g  | Mash    | ---  |