

# Grodziskie11

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- Gravity **7.3 BLG**
- ABV **2.8 %**
- IBU **16**
- SRM **3.7**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **70 C**, Time **40 min**
- Temp **77 C**, Time **1 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **70C**
- Keep mash **1 min** at **77C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

## Fermentables

| Type  | Name                                 | Amount         | Yield | EBC |
|-------|--------------------------------------|----------------|-------|-----|
| Grain | Weyermann - Pszeniczny wędzony dębem | 2 kg (66.7%)   | 80 %  | 5   |
| Grain | Pszeniczny                           | 0.5 kg (16.7%) | 85 %  | 4   |
| Grain | Pszeniczny Karmelowy                 | 0.1 kg (3.3%)  | 75 %  | 125 |
| Grain | Pilzneński                           | 0.4 kg (13.3%) | 81 %  | 4   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Mash                | Lublin (Lubelski) | 30 g   | 0 min  | 4 %        |
| Boil                | Lublin (Lubelski) | 25 g   | 60 min | 4 %        |
| Boil                | Lublin (Lubelski) | 15 g   | 15 min | 4 %        |
| Aroma (end of boil) | Lublin (Lubelski) | 10 g   | 0 min  | 4 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale  | Dry  | 11 g   | Safbrew    |