

# Grodziskie

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- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **48**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **67.5C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount      | Yield | EBC |
|-------|-----------------------|-------------|-------|-----|
| Grain | Weyermann - Grodziski | 5 kg (100%) | 80 %  | 4   |

## Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Marynka | 30 g   | 60 min   | 7.7 %      |
| Boil    | Citra   | 30 g   | 15 min   | 12.3 %     |
| Boil    | Citra   | 30 g   | 5 min    | 12.3 %     |
| Dry Hop | Citra   | 30 g   | 7 day(s) | 12 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |