

# Grodziskie q

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- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **18**
- SRM **3.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **31.2 liter(s)** of **76C** water or to achieve **41.8 liter(s)** of wort

## Fermentables

| Type    | Name                        | Amount        | Yield | EBC |
|---------|-----------------------------|---------------|-------|-----|
| Grain   | Weyermann - Grodziski       | 5 kg (89.3%)  | 80 %  | 4   |
| Adjunct | Rice Hulls                  | 0.3 kg (5.4%) | 1 %   | 0   |
| Grain   | Weyermann - Melanoiden Malt | 0.3 kg (5.4%) | 81 %  | 53  |

## Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Oktawia  | 25 g   | 30 min | 7.1 %      |
| Boil      | Oktawia  | 25 g   | 15 min | 7.1 %      |
| Whirlpool | Oktawia  | 100 g  | 20 min | 7.1 %      |
| Whirlpool | Puławski | 100 g  | 20 min | 8.9 %      |

## Yeasts

| Name            | Type | Form   | Amount | Laboratory |
|-----------------|------|--------|--------|------------|
| FM53 Voss kveik | Ale  | Liquid | 30 ml  | FM         |