

# Grodziskie

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **21**
- SRM **2.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount      | Yield | EBC |
|-------|------------------------------------|-------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 3 kg (100%) | 80 %  | 3   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | Lomik | 50 g   | 25 min | 3.8 %      |
| Boil    | Lomik | 20 g   | 10 min | 3.8 %      |

## Yeasts

| Name                | Type  | Form   | Amount | Laboratory       |
|---------------------|-------|--------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Liquid | 15 ml  | Fermentum Mobile |

## Extras

| Type   | Name          | Amount | Use for   | Time     |
|--------|---------------|--------|-----------|----------|
| Fining | Karuk         | 10 g   | Secondary | 2 day(s) |
| Fining | Łuska owsiana | 150 g  | Mash      | 0 min    |

## Notes

- Fermentacja:  
Burzliwa (6-7 dni w 18 st. C)  
Cicha (8-9 dni w 18 st. C)

Dojrzewanie piwa:  
3 tygodnie w temperaturze 16-17st. C.

Woda pH = 7

Łuska owsiana to 5% zasypu  
*Oct 17, 2019, 1:19 PM*