

# Grodziskie

- Gravity **7.3 BLG**
- ABV ---
- IBU **21**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **54.7 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **71 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **71C**
- Keep mash **5 min** at **76C**
- Sparge using **39.7 liter(s)** of **76C** water or to achieve **54.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	5 kg (75.8%)	80 %	4
Grain	Viking Pale Ale malt	1 kg (15.2%)	80 %	5
Adjunct	Rice Hulls	0.6 kg (9.1%)	1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lomik	30 g	60 min	3.8 %
Boil	Lublin (Lubelski)	30 g	60 min	4 %
Boil	Styrian Golding	5 g	40 min	5 %
Aroma (end of boil)	Lomik	20 g	15 min	3.8 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Liquid	300 ml	Fermentum Mobile