

# Grodziskie

- Gravity **9 BLG**
- ABV ---
- IBU **27**
- SRM **2.9**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **66.3 C**, Time **45 min**
- Temp **71.2 C**, Time **15 min**
- Temp **80 C**, Time **1 min**

## Mash step by step

- Heat up **12.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **45 min** at **66.3C**
- Keep mash **15 min** at **71.2C**
- Keep mash **1 min** at **80C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	2.75 kg (77.5%)	80 %	3
Grain	Weyermann - Smoked Malt (czereśnia)	0.8 kg (22.5%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	11 g	50 min	11.6 %
Boil	lunga	11 g	40 min	11.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min