

# Gruby Magnat Wielkopolski

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **22**
- SRM **3.1**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **8 %**
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **16.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **17.5 liter(s)**

## Steps

- Temp **68 C**, Time **90 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **16.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Grodziski	2 kg (80%)	80 %	4
Grain	Pilzneński	0.5 kg (20%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnat	8 g	60 min	14.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Liquid	75 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	łuska ryżowa sterylizowana	100 g	Mash	90 min