

# Grodziskie

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **24**
- SRM **2.4**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **66 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **20 min** at **66C**
- Keep mash **40 min** at **72C**
- Sparge using **22.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny wędzony dębem (Viking)	2 kg (50%)	80 %	3
Grain	Pszeniczny wędzony dębem (Weyermann)	2 kg (50%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	30 min	11 %
Aroma (end of boil)	Tomyski	50 g	3 min	2.8 %
Whirlpool	Tomyski	50 g	0 min	2.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
/polowa/ FM51 Grodzie Dębowe	Wheat	Liquid	100 ml	Fermentum Mobile
/polowa/ brett amalgamation	Ale	Slant	100 ml	Yeast Bay

## Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Water Agent	gips	4 g	Mash	60 min
Water Agent	sól epsom	6 g	Mash	60 min
Water Agent	sól kuchenna	2 g	Mash	60 min
Water Agent	kreda	8 g	Mash	60 min
Fining	whirflock	2 g	Boil	5 min