

# imperial grodziskie

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **30**
- SRM **3.9**
- Style **Grodziskie**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **0.6 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	4 kg (100%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	20 min	11 %
Boil	nowotomyski	100 g	5 min	2.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Wheat	Slant	100 ml	Fermentum Mobile

## 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	1 g	Boil	5 min
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