

# GRODZISZ 2020

- Gravity **8.3 BLG**
- ABV **3.2 %**
- IBU **22**
- SRM **2.8**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **66 C**, Time **15 min**
- Temp **72 C**, Time **45 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **15 min** at **66C**
- Keep mash **45 min** at **72C**
- Sparge using **23.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	3 kg (73.2%)	80 %	3
Grain	Strzegom Pilzneński	1 kg (24.4%)	80 %	4
Grain	Abbey Castle	0.1 kg (2.4%)	80 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	30 min	11 %
Whirlpool	Saaz (Czech Republic)	50 g	1 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	łuska ryżowa	150 g	Mash	60 min
Water Agent	chlorek wapnia	3 g	Mash	60 min

Water Agent	gips	3 g	Mash	60 min
Fining	whirflock	2 g	Boil	5 min