

# Modern Grodziskie 2024

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **32**
- SRM **3.3**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **38 C**, Time **20 min**
- Temp **50 C**, Time **50 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **20 min** at **38C**
- Keep mash **50 min** at **50C**
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	5 kg (94.3%)	80 %	4.5
pszenica Bruntal				
Adjunct	Łuska Ryżowa	0.3 kg (5.7%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Książęcy	30 g	60 min	7 %
Aroma (end of boil)	Książęcy	30 g	10 min	7.3 %
Whirlpool	Lublin (Lubelski)	30 g	30 min	4.3 %
80°C				

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	wit c	4 g	Bottling	---