

# Grodziskie japoński dąb

- Gravity **9.3 BLG**
- ABV ---
- IBU **30**
- SRM **3.1**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **25.8 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 **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wheat, Torrified	2 kg (50%)	79 %	4
Grain	Viking Wheat Malt	2 kg (50%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	30 min	10 %
Aroma (end of boil)	Sorachi Ace	20 g	10 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe średnio palone	20 g	Boil	60 min