

BERNARDYŃSKIE

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **30**
- SRM **4.5**
- Style **Other Smoked Beer**

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 **31.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **26.9 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.6 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Grodziski pszeniczny wędzony dębem	5 kg (80%)	80 %	3
Grain	Pilzński	1 kg (16%)	81 %	4
Grain	Caraamber	0.25 kg (4%)	75 %	70

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	9.4 %
Boil	lunga	25 g	15 min	9.4 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Finings	Łuska ryżowa	100 g	Mash	70 min