

Apa, dobrze dla drożdży

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.3**
- Style **American Pale Ale**

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 **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (76.3%)	82 %	4
Grain	Pszeniczny	0.5 kg (8.5%)	85 %	4
Grain	Monachijski	0.2 kg (3.4%)	80 %	16
Grain	Płatki owsiane	0.5 kg (8.5%)	85 %	3
Grain	Abbey Malt Weyermann	0.2 kg (3.4%)	75 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis