

10# powrót do korzeni

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	6 %
Boil	Mosaic	10 g	60 min	11.8 %
Boil	Cascade	10 g	15 min	6 %
Boil	Mosaic	10 g	15 min	11.8 %
Boil	Cascade	10 g	3 min	6 %
Boil	Mosaic	10 g	3 min	11.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
US West Coast	Ale	Dry	10 g	Gozdawa