

Nowe

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **46**
- SRM **17**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (66.7%)	80 %	5
Grain	Monachijski	0.5 kg (8.3%)	80 %	16
Grain	Karmelowy Pszeniczny Strzegom	1 kg (16.7%)	79 %	130
Grain	Simpsons - Crystal Rye	0.5 kg (8.3%)	73 %	177

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Izabella	30 g	30 min	5 %
Whirlpool	Izabella	70 g	20 min	5 %

Yeasts

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