

Apa mocniejsza

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **33**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24.1 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **18.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (93.5%)	80 %	5
Grain	Strzegom Karmel 30	0.25 kg (4.7%)	75 %	30
Grain	Słód pszeniczny Bestmalz	0.1 kg (1.9%)	82 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	30 g	60 min	8.5 %
Aroma (end of boil)	Citra	15 g	10 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis