

Apa mocniejsza

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **40**
- SRM **4.9**
- 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 **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

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

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **11.5 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 (90.9%)	80 %	5
Grain	Strzegom Karmel 30	0.25 kg (4.5%)	75 %	30
Grain	Słód pszeniczny Bestmalz	0.25 kg (4.5%)	82 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	30 g	30 min	8.5 %
Boil	Lublin (Lubelski)	50 g	20 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	50 g	10 min	4 %

Yeasts

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