

Apa mocniejsza

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **40**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **67 C**, Time **80 min**
- Temp **72 C**, Time **45 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **45 min** at **72C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.1 kg (80.3%)	80 %	5
Grain	Strzegom Karmel 30	0.3 kg (4.7%)	75 %	30
Grain	Słód pszeniczny Bestmalz	0.4 kg (6.3%)	82 %	5
Grain	Pilzneński	0.55 kg (8.7%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	30 g	30 min	8.5 %
Boil	Lublin (Lubelski)	50 g	15 min	5 %
Aroma (end of boil)	Lublin (Lubelski)	50 g	5 min	5 %
Boil	Citra	8 g	30 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis