

APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **86**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22.7 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **22.7 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pszeniczny	2.4 kg (42.3%)	81 %	6
Grain	Viking Pale Ale malt	2.4 kg (42.3%)	80 %	5
Grain	Simpsons - Golden Naked Oats	0.5 kg (8.8%)	73 %	20
Grain	Płatki owsiane	0.18 kg (3.2%)	85 %	3
Grain	Barley, Flaked	0.2 kg (3.5%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum PL	20 g	60 min	12.9 %
Whirlpool	Simcoe	60 g	20 min	12.6 %
Whirlpool	Columbus/Tomahawk/Zeus	50 g	20 min	16.5 %
Whirlpool	Chinook	40 g	20 min	11.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
LalBrew Voss Kveik Ale Yeast	Ale	Liquid	20 ml	Lallemand