

Apacz

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **50**
- SRM **4.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (75.2%)	80 %	5
Grain	Strzegom Pszeniczny	1 kg (15%)	81 %	6
Grain	Weyermann - Carapils	0.5 kg (7.5%)	78 %	4
Grain	Weyermann - Acidulated Malt	0.15 kg (2.3%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	50 g	60 min	7 %
Boil	Simcoe	10 g	20 min	13.3 %
Boil	Citra	10 g	20 min	12.3 %
Boil	Centennial	25 g	10 min	9.7 %
Whirlpool	Centennial	25 g	5 min	9.7 %
Dry Hop	Simcoe	40 g	6 day(s)	13.3 %
Dry Hop	Citra	40 g	6 day(s)	12.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54	Ale	Slant	500 ml	fermentum mobile