APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **45**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg *(66.7%)*	80 %	5
Grain	Strzegom Wiedeński	0.5 kg *(16.7%)*	79 %	10
Grain	Pszeniczny	0.5 kg *(16.7%)*	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	15 g	60 min	13.2 %
Boil	Amarillo	5 g	10 min	8.9 %
Boil	Cascade	5 g	10 min	5.8 %
Boil	Citra	5 g	10 min	12.5 %
Dry Hop	Mosaic	10 g	4 day(s)	13.2 %
Dry Hop	Amarillo	20 g	4 day(s)	8.9 %
Dry Hop	Cascade	20 g	4 day(s)	5.8 %
Dry Hop	Citra	20 g	4 day(s)	12.5 %

Yeasts

Name	Type	Form	Amount	Laboratory

Safale US-05	Ale	Dry	11.5 g	Fermentis