

APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **38**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

Steps

- Temp **44 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **30 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **10 min** at **44C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **30.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg (80%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (10%)	79 %	22
Grain	Karmelowy Jasny 30EBC	0.5 kg (5%)	75 %	30
Grain	słód pszeniczny	0.5 kg (5%)	82 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	CTZ	30 g	60 min	15.8 %
Boil	ctz	24 g	15 min	15.8 %
Aroma (end of boil)	equanot	25 g	0 min	14.7 %
Aroma (end of boil)	simcoe	25 g	0 min	12.8 %
Dry Hop	equanot	25 g	4 day(s)	14.7 %
Dry Hop	simcoe	25 g	4 day(s)	12.8 %
Dry Hop	ctz	46 g	4 day(s)	14.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	23 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock T	2.5 g	Boil	15 min