

SatrAPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **38**
- SRM **7.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.5 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.9 kg (76%)	80 %	5
Grain	Płatki owsiane	0.1 kg (4%)	60 %	3
Grain	Słód jęczmienny wędzony bukiem	0.2 kg (8%)	82 %	6
Grain	Caramunich® typ I	0.3 kg (12%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	10 g	60 min	14 %
Boil	Horizon	5 g	5 min	14 %
Boil	Azacca	5 g	5 min	14 %
Boil	Nugget	5 g	1 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5.75 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
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Spice	Werbena	10 g	Boil	10 min
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