

Smoked APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **2 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (72.7%)	80 %	6
Grain	Smoked Malt	1 kg (18.2%)	80 %	10
Grain	Viking Munich Malt	0.5 kg (9.1%)	78 %	13

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	50 g	15 min	5.2 %
Dry Hop	Cascade PL	50 g	2 day(s)	5.2 %
Boil	Izabella PL	50 g	40 min	5.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	20 g	Safale