

APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **31**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **40 min**
- Evaporation rate **5 %/h**
- Boil size **12.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8.4 liter(s)**

Steps

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

Mash step by step

- Heat up **6 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **12.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.4 kg (100%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	25 min	12 %
Boil	Mosaic	5 g	25 min	10 %
Boil	Cascade	5 g	25 min	6 %
Boil	citra	5 g	10 min	12 %
Boil	Mosaic	5 g	10 min	10 %
Boil	Cascade	5 g	10 min	6 %
Whirlpool	Citra	5 g	0 min	12 %
Whirlpool	Mosaic	5 g	0 min	10 %
Whirlpool	Cascade	5 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis