

APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **5.1**
- 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 **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **80C**
- Sparge using **12.8 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	2 kg (40%)	80 %	5
Grain	Viking Munich Malt	1 kg (20%)	78 %	18
Grain	Viking Pilsner malt	1 kg (20%)	82 %	4
Grain	Viking Wheat Malt	1 kg (20%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Cascade	20 g	5 min	6 %
Boil	Amarillo	20 g	5 min	9.5 %
Dry Hop	Cascade	30 g	5 day(s)	6 %
Dry Hop	Amarillo	30 g	5 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis