

DDH APA

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **56**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

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

Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.8 kg (95%)	80 %	5
Grain	Carahell	0.2 kg (5%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pioneer	30 g	60 min	8.8 %
Boil	Citra	30 g	5 min	13.9 %
Boil	Amarillo	30 g	5 min	9.8 %
Boil	Mosaic	30 g	5 min	12.6 %
Dry Hop	Citra	60 g	10 day(s)	13.9 %
Dry Hop	Amarillo	60 g	10 day(s)	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale