

Cold APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **41**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **1 %**
- Size with trub loss **63.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **70 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **44 liter(s)** of **76C** water or to achieve **70 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	10 kg (76.9%)	82 %	4
Grain	rice flakes	2 kg (15.4%)	78.3 %	2.5
Grain	Chit Malt	1 kg (7.7%)	50 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	12.4 %
Whirlpool	Mosaic 80C	100 g	30 min	12.8 %
Whirlpool	idaho 7 75C	100 g	20 min	13.8 %