

Cold APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **3.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **66 liter(s)**
- Trub loss **1 %**
- Size with trub loss **70 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **76.9 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

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

Mash step by step

- Heat up **48 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **44.9 liter(s)** of **76C** water or to achieve **76.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	12 kg (75%)	82 %	4
Grain	rice flakes	3 kg (18.8%)	78.3 %	2.5
Grain	Chit Malt	1 kg (6.3%)	50 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	iunga 90C	100 g	30 min	12 %
Whirlpool	iunga 80C	100 g	20 min	12 %