

Apa#2

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **25**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale / Pilz Crisp	1.5 kg (30%)	81 %	5
Grain	Viking Vienna Malt	1.5 kg (30%)	79 %	7
Grain	Viking Pale Ale malt	1.5 kg (30%)	80 %	5
Grain	Viking Wheat Malt	0.5 kg (10%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	6.1 %
Boil	Izabella	20 g	20 min	6.8 %
Aroma (end of boil)	Mandarina Bavaria	30 g	5 min	9.1 %
Dry Hop	Mandarina Bavaria	30 g	5 day(s)	9.1 %
Dry Hop	Mosaic	30 g	5 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
us 05	Ale	Slant	200 ml	fermentis