

TAKA APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **30**
- SRM **13.7**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bruntal Pale Ale	5 kg (96.2%)	80 %	35
Grain	Caramel/Crystal Malt - 10L	0.2 kg (3.8%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	55 min	13 %
Boil	Chinook	10 g	5 min	13 %
Boil	Ahtanum	10 g	5 min	5 %
First Wort	Ahtanum	20 g	0 min	5 %
First Wort	Columbus/Tomahawk/Zeus	10 g	0 min	15.5 %
First Wort	Equinox	10 g	0 min	13.1 %
Dry Hop	Columbus/Tomahawk/Zeus	20 g	5 day(s)	15.5 %
Dry Hop	Equinox	20 g	5 day(s)	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---