

Fruit APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **8 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **28.6 liter(s)**
- Total mash volume **33.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **28.6 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (76.9%)	80 %	5
Grain	Weyermann pszeniczny jasny	1 kg (19.2%)	80 %	6
Grain	Karmelowy 100EBC	0.2 kg (3.8%)	75 %	100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	15 g	40 min	5.2 %
Boil	Mandarina Bavaria	15 g	30 min	10 %
Aroma (end of boil)	Cascade PL	20 g	5 min	5.2 %
Aroma (end of boil)	Mandarina Bavaria	30 g	5 min	10 %
Whirlpool	Mandarina Bavaria	40 g	10 min	10 %
Whirlpool	Cascade PL	20 g	10 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	40 ml	---