

APA Mango Cascade

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **7.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **9.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **12.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.7 liter(s)**
- Total mash volume **8.9 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **6.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **12.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (90.1%)	82 %	4
Grain	Strzegom Karmel 150	0.15 kg (6.8%)	75 %	150
Grain	Viking Wheat Malt	0.07 kg (3.2%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	4 g	60 min	5.5 %
Boil	Cascade PL	4 g	30 min	5.5 %
Aroma (end of boil)	Cascade PL	9 g	15 min	5.5 %
Whirlpool	Cascade PL	14 g	5 min	5.5 %
Dry Hop	Cascade PL	17 g	5 day(s)	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Other	Mango Pulp Alphonso	450 g	Secondary	9 day(s)
Other	Passion fruit	170 g	Secondary	5 day(s)