

Cascade APA

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **44**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.1 kg (90.3%)	79 %	6
Grain	Strzegom Wiedeński	0.3 kg (5.3%)	79 %	10
Grain	Strzegom Karmel 30	0.25 kg (4.4%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	12 %
Aroma (end of boil)	Cascade	15 g	15 min	8.3 %
Aroma (end of boil)	Cascade	20 g	5 min	8.3 %
Whirlpool	Cascade	15 g	5 min	8.3 %
Dry Hop	Chinook	15 g	4 day(s)	12 %
Dry Hop	Cascade	40 g	4 day(s)	8.3 %

Yeasts

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