

American Cascade Pale Ale 2020

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **38**
- SRM **8.4**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (52.1%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (20.8%)	79 %	10
Grain	Strzegom Monachijski typ I	1 kg (20.8%)	79 %	16
Grain	Strzegom Karmel 150	0.3 kg (6.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	60 min	6 %
Boil	Cascade	30 g	30 min	6 %
Boil	Cascade	20 g	5 min	6 %
Dry Hop	Cascade	50 g	7 day(s)	6 %