

American Cascade Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (46.5%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (23.3%)	79 %	10
Grain	Monachijski	1 kg (23.3%)	80 %	16
Grain	Caramel/Crystal Malt - 10L	0.3 kg (7%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	25 g	55 min	6 %
Boil	Cascade	25 g	10 min	6 %
Aroma (end of boil)	Cascade	25 g	9 min	6 %
Dry Hop	Cascade	55 g	7 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar