

# Cascade Pale Ale

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **36**
- SRM **5.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24.4 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **24.4 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	0.83 kg (13.6%)	79 %	6
Grain	Strzegom Pilzniejszy	1.5 kg (24.5%)	80 %	4
Grain	Strzegom Pszeniczny	1 kg (16.4%)	81 %	6
Grain	Karmelowy Jasny 30EBC	0.28 kg (4.6%)	75 %	30
Grain	Strzegom Wiedeński	2.5 kg (40.9%)	79 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	10 min	6 %
Boil	Centennial	30 g	60 min	10.5 %
Whirlpool	Cascade	15 g	15 min	6 %
Dry Hop	Cascade	20 g	5 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	7 g	Fermentis