

Cascade Pale Ale

- Gravity **12.8 BLG**
- ABV ---
- IBU **42**
- SRM **5.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	2.2 kg (48.9%)	80 %	4
Grain	Pilzneński	1 kg (22.2%)	85 %	4
Grain	Strzegom Monachijski typ I	1 kg (22.2%)	79 %	16
Grain	Pszeniczny	0.3 kg (6.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8.9 %
Boil	Cascade	20 g	60 min	6.7 %
Boil	Cascade	10 g	30 min	6.7 %
Aroma (end of boil)	Cascade	20 g	1 min	6.7 %
Dry Hop	cascade	50 g	5 day(s)	6.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Slant	100 ml	Safale