

# Cascade pils

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **32**
- SRM **3.9**
- Style **Classic American Pilsner**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **32 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **32 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (88.2%)	81 %	4
Grain	Płatki pszeniczne	0.4 kg (5.9%)	85 %	3
Grain	Jęczmień niesłodowany	0.4 kg (5.9%)	75 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	30 min	6 %
Aroma (end of boil)	Cascade	30 g	15 min	6 %
Boil	Marynka	20 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Brewgo-2	Ale	Dry	14 g	Browin