

## #53 Cascade Pils

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **40**
- SRM **3**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **62 C**, Time **15 min**
- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **15 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Lager	4.5 kg (90%)	82 %	3
Grain	Malteurop Wheat	0.5 kg (10%)	86.8 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13.5 %
Boil	Cascade	10 g	30 min	6.3 %
Boil	Cascade	10 g	10 min	6.3 %
Boil	Cascade	30 g	0 min	6.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Slant	300 ml	Fermentum Mobile