

## wiosenne cascade

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**

### Mash step by step

- Heat up **10 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (100%)	80 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	15 min	9 %
Whirlpool	Cascade	30 g	30 min	9 %
Dry Hop	Cascade	40 g	5 day(s)	9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	5 g	safale