

## Single cascade

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **5**
- Style **White IPA**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

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

### Mash step by step

- Heat up **9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (100%)	85 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	30 g	20 min	5.2 %
Boil	Cascade PL	10 g	5 min	5.2 %
Boil	Cascade PL	10 g	2 min	5.2 %
Whirlpool	Cascade PL	35 g	20 min	5.2 %

### Yeasts

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