

## #5

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **38**
- SRM **4.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3.5 kg (65.1%)	80 %	8
Grain	Płatki pszeniczne	0.625 kg (11.6%)	85 %	3
Grain	Płatki owsiane	0.625 kg (11.6%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.625 kg (11.6%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	13.2 %
Boil	Simcoe	25 g	10 min	13.2 %
Whirlpool	Eureka!	30 g	10 min	18 %
Dry Hop	Equinox	50 g	7 day(s)	13.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	Puree z mango	1000 g	Secondary	7 day(s)