

## SUMMER ALE 1(8)

- Gravity **12.3 BLG**
- ABV ---
- IBU **77**
- SRM **7.2**
- Style **American Pale Ale**

### 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 **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **62 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **0 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (83.3%)	79 %	6
Grain	Biscuit Malt	0.4 kg (8.3%)	79 %	45
Grain	Rice, Flaked	0.3 kg (6.3%)	70 %	2
Grain	Oats, Flaked	0.1 kg (2.1%)	--- %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Chinook	20 g	30 min	13 %
Boil	Chinook	10 g	15 min	13 %
Boil	Mosaic	10 g	30 min	10 %
Boil	Mosaic	10 g	15 min	10 %
Whirlpool	Mosaic	10 g	0 min	10 %
Dry Hop	Mosaic	20 g	7 day(s)	10 %
Boil	Citra	10 g	30 min	12 %
Whirlpool	Citra	20 g	15 min	12 %
Whirlpool	Citra	20 g	0 min	12 %
Dry Hop	Citra	50 g	7 day(s)	12 %

Boil	Mandarina Bavaria	10 g	15 min	10 %
Whirlpool	Mandarina Bavaria	10 g	0 min	10 %
Dry Hop	Mandarina Bavaria	15 g	7 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Liberty Bell Ale M36 Mangrove Jack's	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	Želatyna	4 g	Secondary	3 day(s)