

ORANGE JUICY APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **35**
- SRM **4.8**
- 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 **26 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter	3 kg (50%)	81 %	6
Liquid Extract	Sok pomarańczowy	2 kg (33.3%)	9 %	5
Grain	Pszoniczny	1 kg (16.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	12.9 %
Boil	Citra	15 g	10 min	12.9 %
Boil	Citra	20 g	5 min	12.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Skórki słodkiej pomarańczy	20 g	Boil	10 min