

AUS/NZ APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **29.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (82.5%)	85 %	7
Grain	Płatki owsiane	0.4 kg (8.2%)	85 %	3
Grain	Pszeniczny	0.25 kg (5.2%)	85 %	4
Grain	Simpsons - Crystal Rye	0.2 kg (4.1%)	73 %	177

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	5 g	60 min	17.2 %
Boil	Enigma (AUS)	20 g	15 min	17.2 %
Boil	Enigma (AUS)	25 g	5 min	17.2 %
Dry Hop	Motueka	100 g	5 day(s)	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Water Agent	mech	5 g	Boil	15 min
Water Agent	gips	4 g	Mash	60 min