

# Australian Pale Ale - warka 1

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **5.1**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **0 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód jęczmienny pilznieński Viking Malt	3 kg (45.5%)	80 %	4
Grain	Słód jęczmienny Pale Ale Zero Viking Malt	3 kg (45.5%)	79 %	6
Grain	Słód jęczmienny Carahell® 20-30 EBC Weyermann®	0.6 kg (9.1%)	74 %	25

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	15 g	60 min	11 %
Boil	Lunga	15 g	30 min	11 %
Aroma (end of boil)	Galaxy	30 g	5 min	15 %
Dry Hop	Motueka	30 g	3 day(s)	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Lesaffre Fermenti