

# KANGAROO PALE ALE

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **48**
- SRM **5.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **23.6 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 **18.1 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 **14.8 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg (90.9%)	80 %	5
Grain	Carared	0.5 kg (9.1%)	75 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vic secret	10 g	60 min	19.9 %
Boil	Vic secret	20 g	15 min	19.9 %
Boil	Vic secret	20 g	5 min	19.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M66 Hophead Ale	Ale	Dry	10.5 g	Mangrove Jack's