

Kangaroo Pale Ale

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **38**
- SRM **7.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.3 kg (89.8%)	80 %	5
Grain	Karmelowy żytni Strzegom	0.3 kg (5.1%)	75 %	150
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	60 min	15 %
Boil	Vic Secret	10 g	60 min	16.3 %
Aroma (end of boil)	Galaxy	10 g	5 min	15 %
Aroma (end of boil)	Vic Secret	10 g	5 min	16.3 %
Whirlpool	Vic Secret	10 g	5 min	16.3 %
Whirlpool	Enigma (AUS)	10 g	5 min	17.2 %
Dry Hop	Galaxy	20 g	4 day(s)	15 %
Dry Hop	Vic Secret	10 g	4 day(s)	16.3 %
Dry Hop	Enigma (AUS)	20 g	4 day(s)	17.2 %

Yeasts

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