

Zula lunga Pale Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **32**
- SRM **3.9**
- 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 **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **75 C**, Time **20 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **75C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	14 g	50 min	11 %
Boil	Zula	40 g	0 min	7 %
Whirlpool	Zula	60 g	30 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	125 ml	Fermentum Mobile