

# Zula Ale

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **13.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **10 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **79C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.5 kg (66.7%)	82 %	4
Grain	Pszeniczny	1 kg (19%)	85 %	4
Grain	Płatki owsiane	0.5 kg (9.5%)	60 %	3
Grain	Strzegom Karmel 600	0.25 kg (4.8%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	30 g	60 min	8.3 %
Boil	Zula	10 g	10 min	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Liquid	30 ml	Fermentum Mobile