

# Ale

- Gravity **17.7 BLG**
- ABV ---
- IBU **38**
- SRM **11.3**
- Style **Old Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **78 C**, Time **1 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (88.5%)	80 %	5
Grain	Strzegom Karmel 300	0.25 kg (4.4%)	75 %	300
Grain	Płatki orkiszowe	0.2 kg (3.5%)	80 %	4
Grain	Płatki owsiane	0.2 kg (3.5%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	50 min	11 %
Boil	Marynka	15 g	40 min	10 %
Boil	Lublin (Lubelski)	20 g	15 min	4 %
Dry Hop	Lublin (Lubelski)	30 g	5 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale