

# ala bitter

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **29**
- SRM **12.5**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **18.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.7 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **8.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **18.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.4 kg (82.2%)	80 %	4
Grain	Caraaroma	0.15 kg (5.1%)	78 %	350
Grain	Płatki owsiane	0.15 kg (5.1%)	85 %	3
Grain	Jęczmień niesłodowany (płatki)	0.15 kg (5.1%)	75 %	2
Grain	Weyermann - Carafa I	0.07 kg (2.4%)	70 %	800

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	20 min	4.5 %
Boil	lunga	10 g	40 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	40 ml	Fermentum Mobile