

# Ordinary Bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **27**
- SRM **7.5**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **69 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **90 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.2 kg (91.4%)	80 %	7
Grain	Strzegom Karmel 150	0.3 kg (8.6%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	7 %
Boil	Fuggles	25 g	10 min	4.5 %
Boil	Fuggles	20 g	5 min	4.5 %
Boil	Challenger	25 g	1 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar