

# BITTER

- Gravity **10 BLG**
- ABV ---
- IBU **28**
- SRM **12**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **14.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (84.2%)	79 %	6
Grain	Strzegom Karmel 600	0.25 kg (5.3%)	68 %	600
Grain	Strzegom Pszeniczny	0.5 kg (10.5%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	10 g	60 min	7 %
Boil	East Kent Goldings	10 g	60 min	5.1 %
Boil	Challenger	10 g	30 min	7 %
Boil	East Kent Goldings	10 g	30 min	5.1 %
Boil	Challenger	10 g	15 min	7 %
Boil	East Kent Goldings	10 g	15 min	5.1 %
Dry Hop	Challenger	20 g	3 day(s)	7 %
Dry Hop	East Kent Goldings	20 g	3 day(s)	5.1 %

## Yeasts

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