

# English breakfast

- Gravity **15 BLG**
- ABV ---
- IBU **55**
- SRM **9.5**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (80%)	79 %	6
Grain	Strzegom pszeniczny	0.5 kg (8%)	81 %	6
Grain	Strzegom Karmel 150	0.25 kg (4%)	75 %	150
Sugar	cukier	0.5 kg (8%)	100 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	25 g	60 min	14.2 %
Boil	Progress	20 g	30 min	5.5 %
Boil	Kent Goldings	15 g	15 min	5.1 %
Boil	Progress	20 g	15 min	5.5 %
Boil	Fuggles	15 g	15 min	5.2 %
Boil	Kent Goldings	15 g	0 min	5.1 %
Boil	Fuggles	15 g	0 min	5.2 %
Dry Hop	Kent Goldings	30 g	4 day(s)	5.5 %
Dry Hop	Fuggles	30 g	4 day(s)	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale