

# English breakfast

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- 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<br>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     |