

# stout

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **27**
- SRM **22.5**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **68 C**, Time **10 min**
- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **68C**
- Keep mash **60 min** at **70C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale              | 2.5 kg (42.4%) | 79 %  | 6   |
| Grain | Mild Malt                      | 1.5 kg (25.4%) | 80 %  | 8   |
| Grain | Strzegom Karmel 300            | 0.3 kg (5.1%)  | 70 %  | 299 |
| Grain | Słód owsiany Fawcett           | 0.2 kg (3.4%)  | 61 %  | 5   |
| Grain | Płatki owsiane                 | 0.4 kg (6.8%)  | 85 %  | 3   |
| Grain | Brown Malt (British Chocolate) | 0.4 kg (6.8%)  | 70 %  | 180 |
| Grain | Strzegom Czekoladowy jasny     | 0.4 kg (6.8%)  | 68 %  | 400 |
| Grain | Fawcett - Pale Chocolate       | 0.2 kg (3.4%)  | 71 %  | 600 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Phoenix | 20 g   | 60 min | 8.5 %      |
| Boil    | Phoenix | 25 g   | 20 min | 8.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |

### Extras

| Type  | Name           | Amount | Use for   | Time     |
|-------|----------------|--------|-----------|----------|
| Spice | Łuska Kakaowa  | 100 g  | Boil      | 10 min   |
| Spice | łuska kakaowa  | 50 g   | Secondary | 7 day(s) |
| Spice | łuska kakakowa | 100 g  | Mash      | 10 min   |