

# Stout

- Gravity **13 BLG**
- ABV ---
- IBU **38**
- SRM **40**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **12 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **32.3 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **67 C**, Time **80 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale         | 5 kg (87%)     | 79 %  | 6    |
| Grain | Strzegom Czekoladowy 1200 | 0.5 kg (8.7%)  | 68 %  | 1200 |
| Grain | Karmelowy Czerwony        | 0.25 kg (4.3%) | 75 %  | 59   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Iunga   | 15 g   | 60 min | 11 %       |
| Boil    | Sybilla | 30 g   | 60 min | 6 %        |
| Boil    | Sybilla | 20 g   | 10 min | 6 %        |

## Yeasts

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