

# Stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **20**
- SRM **34.6**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 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 **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC  |
|-------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (52.2%)   | 80 %  | 5    |
| Grain | Strzegom Karmel 600  | 0.25 kg (4.3%) | 68 %  | 601  |
| Grain | Strzegom Pilzneński  | 2 kg (34.8%)   | 80 %  | 4    |
| Grain | Jęczmień palony      | 0.25 kg (4.3%) | 55 %  | 985  |
| Grain | Strzegom Barwiący    | 0.25 kg (4.3%) | 68 %  | 1300 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 20 g   | 60 min | 10 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |