

# Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **25**
- SRM **20.9**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 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 **4 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount          | Yield  | EBC |
|-------|----------------------------------|-----------------|--------|-----|
| Grain | Viking Pale Ale malt             | 3.5 kg (53.4%)  | 80 %   | 5   |
| Grain | Strzegom Pilzneński              | 0.5 kg (7.6%)   | 80 %   | 4   |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (3.1%)   | 73 %   | 120 |
| Grain | Jęczmień palony                  | 0.3 kg (4.6%)   | 55 %   | 985 |
| Grain | Carafa II                        | 0.1 kg (1.5%)   | 70 %   | 812 |
| Grain | Płatki owsiane                   | 1.2 kg (18.3%)  | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose)             | 0.75 kg (11.5%) | 76.1 % | 0   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 30 g   | 60 min | 10 %       |

## Yeasts

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

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                    |       |           |          |
|--------|--------------------|-------|-----------|----------|
| Flavor | Kawa               | 100 g | Secondary | 7 day(s) |
| Flavor | Ekstrakt z wanilli | 30 g  | Secondary | 7 day(s) |
| 30ml   |                    |       |           |          |