

# Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **42**
- SRM **40.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

## Steps

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

## Mash step by step

- Heat up **8.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC  |
|-------|---------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt      | 1.6 kg (59.3%) | 80 %  | 5    |
| Grain | Płatki owsiane            | 0.25 kg (9.3%) | 85 %  | 3    |
| Grain | Strzegom Wiedeński        | 0.3 kg (11.1%) | 79 %  | 10   |
| Grain | red crystal               | 0.2 kg (7.4%)  | 70 %  | 400  |
| Grain | Jęczmień palony Weyermann | 0.25 kg (9.3%) | 55 %  | 1400 |
| Grain | Coffee Malt - castle malt | 0.1 kg (3.7%)  | 74 %  | 500  |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Magnum   | 15 g   | 60 min | 12.1 %     |
| Boil    | Lubelski | 15 g   | 15 min | 3.6 %      |

## Yeasts

| Name                      | Type | Form   | Amount  | Laboratory       |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 1100 ml | Fermentum Mobile |

## Extras

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

|       |           |     |      |        |
|-------|-----------|-----|------|--------|
| Other | chlodnica | 1 g | Boil | 18 min |
|-------|-----------|-----|------|--------|