

# Stout Festiwalowy

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **31.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.5 liter(s)**
- Total mash volume **13.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **9.5 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

| Type  | Name   | Amount         | Yield | EBC |
|-------|--|----------------|-------|-----|
| Grain | Viking Pale Ale malt                         | 2.5 kg (65.8%) | 80 %  | 5   |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 0.8 kg (21.1%) | 80 %  | 20  |
| Grain | Czekoladowy                                  | 0.3 kg (7.9%)  | 60 %  | 788 |
| Grain | Jęczmień palony                              | 0.2 kg (5.3%)  | 55 %  | 985 |

## Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Marynka         | 20 g   | 60 min | 10 %       |
| Boil    | Hallertau Blanc | 20 g   | 10 min | 11 %       |
| Boil    | Tettnang        | 20 g   | 0 min  | 4 %        |

## Yeasts

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