

stout

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **40**
- SRM **39.6**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.6 liter(s)**
- Total mash volume **7.4 liter(s)**

Steps

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

Mash step by step

- Heat up **5.6 liter(s)** of strike water to **75.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **10.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.1 kg (59.5%) | 80 % | 6 |
| Grain | Płatki jęczmienne | 0.4 kg (21.6%) | 85 % | 3 |
| Grain | Bestmalz - black malt eXtra | 0.25 kg (13.5%) | 65 % | 1400 |
| Grain | Fawcett - Crystal pszeniczny | 0.1 kg (5.4%) | 70 % | 160 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 6.8 % |
| Boil | Styrian Golding | 10 g | 10 min | 2.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|------|-------|--------|-------------|
| Wyeast - Whitbread Ale | Ale | Slant | 50 ml | Wyeast Labs |