

1 stout

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **36**
- SRM **35.6**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **5.3 liter(s)**
- Total mash volume **7.3 liter(s)**

Steps

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

Mash step by step

- Heat up **5.3 liter(s)** of strike water to **82.3C**
- Add grains
- Keep mash **60 min** at **72C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **10.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.25 kg (59.5%) | 80 % | 5 |
| Grain | Viking Munich Malt | 0.5 kg (23.8%) | 78 % | 24 |
| Grain | Strzegom Czekoladowy ciemny | 0.15 kg (7.1%) | 68 % | 1200 |
| Grain | Płatki owsiane | 0.1 kg (4.8%) | 60 % | 3 |
| Grain | Jęczmień palony | 0.1 kg (4.8%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Centennial | 8 g | 55 min | 10.5 % |
| Boil | Centennial | 7 g | 25 min | 10.5 % |
| Aroma (end of boil) | Centennial | 10 g | 0 min | 10.5 % |
| Dry Hop | Centennial | 25 g | 3 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Fermentis |