

Dry dry dry

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **33**
- SRM **25.2**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (50.8%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (16.9%) | 85 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (16.9%) | 79 % | 16 |
| Grain | Płatki owsiane | 0.4 kg (6.8%) | 60 % | 3 |
| Grain | Jęczmień palony | 0.3 kg (5.1%) | 55 % | 985 |
| Grain | Czekoladowy | 0.2 kg (3.4%) | 60 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Marynka | 15 g | 60 min | 10 % |
| Boil | Marynka | 15 g | 20 min | 10 % |
| Boil | East Kent Goldings | 30 g | 15 min | 5.1 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------|--------|---------|--------|
| Water Agent | Gips | 4 g | Mash | 60 min |