

Dry stout

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **18**
- SRM **26**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **80 min**
- Temp **70 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4.5 kg (75%) | --- % | --- |
| Grain | Strzegom Monachijski typ II | 1 kg (16.7%) | 79 % | 22 |
| Grain | Jęczmień palony | 0.25 kg (4.2%) | 55 % | 985 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (4.2%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Fuggles | 30 g | 60 min | 4.5 % |
| Aroma (end of boil) | Fuggles | 30 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Fermentis |