

Extra Choco Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **46**
- SRM **54.8**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.5 kg (68.6%) | 80 % | 5 |
| Grain | Jęczmień palony | 0.3 kg (5.9%) | 55 % | 985 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.3 kg (5.9%) | 73 % | 1001 |
| Grain | Weyermann - Chocolate Rye | 0.3 kg (5.9%) | 60 % | 600 |
| Grain | spelt chocolate orkiszowy | 0.3 kg (5.9%) | 60 % | 550 |
| Grain | Carafa III | 0.3 kg (5.9%) | 70 % | 1034 |
| Grain | Strzegom Barwiący | 0.1 kg (2%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | lunga | 25 g | 60 min | 11 % |
| Aroma (end of boil) | lunga | 25 g | 15 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-----|------|--------|
| Safale S-04 | Ale | Dry | 12 g | Safale |
|-------------|-----|-----|------|--------|