

Dry Stout

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **29**
- SRM **40.2**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **1 %**
- Size with trub loss **30.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **30.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **57 C**, Time **10 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **61.6C**
- Add grains
- Keep mash **10 min** at **57C**
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (66.7%) | 80 % | 5 |
| Grain | płatki jęczmienne | 1 kg (16.7%) | 60 % | 4 |
| Grain | Jęczmień palony | 0.4 kg (6.7%) | 55 % | 1150 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.4 kg (6.7%) | 73 % | 1050 |
| Grain | Weyermann - Dehusked Carafa III | 0.2 kg (3.3%) | 70 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 1 ml | Fermentum Mobile |