

## Dry Stout v.3/2020

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **32.7**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **26.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.2 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 (57.7%)   | 80 %  | 5    |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 1 kg (19.2%)   | 80 %  | 20   |
| Grain | Płatki owsiane                               | 0.6 kg (11.5%) | 85 %  | 3    |
| Grain | Carafa III                                   | 0.2 kg (3.8%)  | 70 %  | 1100 |
| Grain | Pszeniczny<br>Czekoladowy                    | 0.25 kg (4.8%) | 73 %  | 1001 |
| Grain | Jęczmień palony                              | 0.15 kg (2.9%) | 55 %  | 1300 |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Magnum     | 20 g   | 60 min | 12 %       |
| Aroma (end of boil) | Challenger | 20 g   | 0 min  | 7.2 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 250 ml | Fermentis  |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g    | Boil    | 10 min |