

# Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **34.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**
- Temp **70 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **77C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

| Type  | Name                                         | Amount         | Yield | EBC  |
|-------|----------------------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt                         | 2.5 kg (73.5%) | 80 %  | 5    |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 0.5 kg (14.7%) | 80 %  | 20   |
| Grain | Jęczmień palony<br>Weyermann                 | 0.2 kg (5.9%)  | 55 %  | 985  |
| Grain | Strzegom<br>Czekoladowy<br>ciemny Weyermann  | 0.2 kg (5.9%)  | 68 %  | 1200 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 25 g   | 60 min | 4.5 %      |
| Boil    | Fuggles | 10 g   | 15 min | 4.5 %      |

## Yeasts

| Name                         | Type | Form   | Amount  | Laboratory       |
|------------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie<br>Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type        | Name          | Amount | Use for | Time   |
|-------------|---------------|--------|---------|--------|
| Water Agent | węglan wapnia | 5 g    | Mash    | 60 min |

## Notes

- fermentacja 15-19 C  
*Jan 15, 2019, 6:41 PM*