

## DRY 1

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **48**
- SRM **28.2**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.4 liter(s)**

### Steps

- Temp **66 C**, Time **70 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **8.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

### Fermentables

| Type    | Name                    | Amount          | Yield | EBC |
|---------|-------------------------|-----------------|-------|-----|
| Grain   | Briess - Pale Ale Malt  | 2.2 kg (77.9%)  | 80 %  | 7   |
| Grain   | Briess - Chocolate Malt | 0.125 kg (4.4%) | 60 %  | 690 |
| Grain   | Jęczmień palony         | 0.2 kg (7.1%)   | 55 %  | 985 |
| Adjunct | płatki jęczmienne       | 0.3 kg (10.6%)  | 85 %  | 3   |

### Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Target     | 20 g   | 60 min   | 10.5 %     |
| Aroma (end of boil) | Target     | 10 g   | 10 min   | 10.5 %     |
| Dry Hop             | Centennial | 10 g   | 7 day(s) | 10.5 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |