

# Dry Stout

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **30**
- SRM **30.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **55 C**, Time **5 min**
- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **21.6 liter(s)** of **76C** water or to achieve **34.4 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Castle Pale Ale   | 3.9 kg (60.9%) | 80 %  | 8   |
| Grain | Monachijski       | 1.3 kg (20.3%) | 80 %  | 16  |
| Grain | Czekoladowy       | 0.4 kg (6.2%)  | 60 %  | 788 |
| Grain | Jęczmień palony   | 0.4 kg (6.2%)  | 55 %  | 985 |
| Grain | płatki jęczmienne | 0.4 kg (6.2%)  | 60 %  | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 35 g   | 60 min | 10 %       |

## Yeasts

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

## Notes

- słody palone(czekoladowy i jęczmień palony) dodajemy przy temperaturze 72stC przerwa 10 minut  
*Feb 26, 2023, 8:00 PM*