

# stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **28**
- 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 **26.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **20.9 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **1 min**

## Mash step by step

- Heat up **16.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **75C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield  | EBC  |
|-------|---------------------------|----------------|--------|------|
| Grain | BESTMALZ - Bestt Pale Ale | 4 kg (82.5%)   | 80.5 % | 6    |
| Grain | Palony jęczmień Weyermann | 0.43 kg (8.9%) | 55 %   | 1000 |
| Grain | castle malting coffe      | 0.22 kg (4.5%) | 78 %   | 500  |
| Sugar | cukier                    | 0.2 kg (4.1%)  | 100 %  | 1    |

## Hops

| Use for    | Name  | Amount | Time   | Alpha acid |
|------------|-------|--------|--------|------------|
| First Wort | lunga | 20 g   | 60 min | 12.4 %     |
| Boil       | lunga | 15 g   | 10 min | 12.4 %     |

## Yeasts

| Name     | Type | Form  | Amount | Laboratory |
|----------|------|-------|--------|------------|
| hot head | Ale  | Slant | 200 ml | po 102     |

## Extras

| Type   | Name        | Amount | Use for | Time   |
|--------|-------------|--------|---------|--------|
| Fining | whirlfloc t | 0.5 g  | Boil    | 10 min |