

# Zwykły stout

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **38.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Steps

- Temp **65 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

| Type  | Name                              | Amount         | Yield | EBC  |
|-------|-----------------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt         | 2.5 kg (59.5%) | 85 %  | 7    |
| Grain | Weyermann pszeniczny jasny        | 0.6 kg (14.3%) | 80 %  | 6    |
| Grain | pszeniczny czekoladowy Weyermann® | 0.4 kg (9.5%)  | 65 %  | 1100 |
| Grain | Jęczmień palony                   | 0.2 kg (4.8%)  | 55 %  | 1100 |
| Grain | jęczmienny wiedeński Weyermann®   | 0.5 kg (11.9%) | 79 %  | 7    |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Fuggles | 70 g   | 60 min | 4.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 11 g   | ---        |