

# Dry stout z resztek

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **35**
- SRM **35**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **51 C**, Time **10 min**
- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.4 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

## Fermentables

| Type  | Name                    | Amount         | Yield | EBC  |
|-------|-------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński     | 3.5 kg (52.2%) | 80 %  | 4    |
| Grain | Strzegom Pszeniczny     | 1.5 kg (22.4%) | 81 %  | 6    |
| Grain | Jęczmień niesłodowany   | 1 kg (14.9%)   | 75 %  | 2    |
| Grain | Briess - Chocolate Malt | 0.7 kg (10.4%) | 60 %  | 1200 |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 15 g   | 60 min | 15.5 %     |
| Boil    | Puławski               | 100 g  | 5 min  | 6 %        |
| Boil    | Columbus/Tomahawk/Zeus | 15 g   | 5 min  | 15.5 %     |

## Yeasts

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