

# Żonkowy stout v2

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **25**
- SRM **25.7**
- Style **Sweet 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 **11 %/h**
- Boil size **28.1 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **35 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

## Fermentables

| Type  | Name                            | Amount         | Yield | EBC  |
|-------|---------------------------------|----------------|-------|------|
| Grain | Mep@ale                         | 2.5 kg (55.6%) | 81 %  | 8.5  |
| Grain | Strzegom Monachijski typ II     | 1 kg (22.2%)   | 79 %  | 22   |
| Grain | Strzegom Czekoladowy jasny      | 0.5 kg (11.1%) | 68 %  | 400  |
| Grain | Strzegom Karmel 30              | 0.25 kg (5.6%) | 75 %  | 30   |
| Grain | Weyermann - Dehusked Carafa III | 0.25 kg (5.6%) | 70 %  | 1024 |

## Hops

| Use for    | Name                   | Amount | Time   | Alpha acid |
|------------|------------------------|--------|--------|------------|
| First Wort | Columbus/Tomahawk/Zeus | 16 g   | 60 min | 14.5 %     |

## Yeasts

| Name                      | Type | Form   | Amount  | Laboratory       |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type   | Name        | Amount | Use for | Time  |
|--------|-------------|--------|---------|-------|
| Other  | laktoza     | 500 g  | Boil    | 5 min |
| Flavor | łuska kakao | 100 g  | Boil    | 5 min |