

# Czekolada - Milk Stout

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **33**
- SRM **30.1**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **20.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale        | 2.4 kg (35.8%) | 79 %  | 6   |
| Grain | Strzegom Pszeniczny      | 2.3 kg (34.3%) | 81 %  | 6   |
| Grain | Strzegom Wiedeński       | 1 kg (14.9%)   | 79 %  | 10  |
| Grain | Fawcett - Pale Chocolate | 0.4 kg (6%)    | 71 %  | 600 |
| Grain | Strzegom Czekoladowy 400 | 0.4 kg (6%)    | 68 %  | 400 |
| Grain | Weyermann - Carafa I     | 0.2 kg (3%)    | 70 %  | 690 |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 33 g   | 60 min | 10.6 %     |

## Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 500 ml | Fermentum Mobile |

## Extras

| Type   | Name         | Amount | Use for   | Time      |
|--------|--------------|--------|-----------|-----------|
| Other  | Laktoza      | 500 g  | Boil      | 15 min    |
| Flavor | Ziarna kakao | 100 g  | Secondary | 15 day(s) |

### Notes

- Carafa I na mash-out.  
*Mar 4, 2019, 8:38 PM*