

Chocolate Vanilla milk stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU ---
- SRM **30.9**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|------|
| Grain | Pilzneński | 4.1 kg (72.4%) | 81 % | 4 |
| Grain | Karmelowy Czerwony | 0.22 kg (3.9%) | 75 % | 59 |
| Grain | Weyermann Caramunich 3 | 0.23 kg (4.1%) | 76 % | 150 |
| Grain | Czekoladowy | 0.23 kg (4.1%) | 60 % | 788 |
| Sugar | Bestmalz - Special X | 0.28 kg (4.9%) | 75 % | 400 |
| Grain | Extra black | 0.13 kg (2.3%) | 65 % | 1400 |
| Grain | Płatki pszeniczne | 0.47 kg (8.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Mash | Marynka | 30 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--|------|------|--------|-----------------|
| Mangrove Jack's M42 New World Strong Ale | Ale | Dry | 20 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------|--------|---------|--------|
| Other | Laktoza | 700 g | Boil | 10 min |