

#4 Milk Stout

- Gravity **15 BLG**
- ABV ---
- IBU **22**
- SRM **40**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **22.9 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---------------------------|----------------|-------|------|
| Grain | Strzegom Pale Ale | 4 kg (63%) | 85 % | 6 |
| Grain | Strzegom Karmel 150 | 0.5 kg (7.9%) | 80 % | 150 |
| Grain | Strzegom Czekoladowy 1200 | 0.5 kg (7.9%) | 80 % | 1202 |
| Grain | Pszeniczny | 0.5 kg (7.9%) | 85 % | 4 |
| Grain | Jęczmień palony | 0.35 kg (5.5%) | 65 % | 985 |
| Adjunct | Płatki jęczmienne | 0.5 kg (7.9%) | 10 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | Kent Goldings | 30 g | 60 min | 7 % |
| Boil | Kent Goldings | 20 g | 10 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M07 British Ale | Ale | Dry | 11.5 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Other | Laktoza | 500 g | Boil | 10 min |
| Fining | Mech Irlandzki | 5 g | Boil | 10 min |