

# Milk Stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **18**
- SRM **21.6**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount        | Yield | EBC  |
|-------|----------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt             | 5 kg (71.4%)  | 80 %  | 5    |
| Grain | Strzegom Pilzneński              | 1 kg (14.3%)  | 80 %  | 4    |
| Grain | Carafa II                        | 0.3 kg (4.3%) | 70 %  | 1100 |
| Grain | Płatki owsiane                   | 0.4 kg (5.7%) | 60 %  | 3    |
| Grain | Słód Caramunich Typ II Weyermann | 0.3 kg (4.3%) | 73 %  | 120  |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Challenger | 30 g   | 60 min | 7 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |

## Extras

| Type  | Name    | Amount | Use for | Time   |
|-------|---------|--------|---------|--------|
| Other | Laktoza | 0.25 g | Boil    | 15 min |