

# MilkStout

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **46**
- SRM **30.3**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **52 C**, Time **30 min**
- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount        | Yield  | EBC  |
|-------|--------------------------|---------------|--------|------|
| Grain | Viking Pale Ale malt     | 5 kg (84.7%)  | 80 %   | 5    |
| Grain | Caramunich® typ I        | 0.3 kg (5.1%) | 73 %   | 80   |
| Grain | Cafe 500 EBC             | 0.2 kg (3.4%) | 75.5 % | 480  |
| Grain | Fawcett - Pale Chocolate | 0.2 kg (3.4%) | 71 %   | 1200 |
| Grain | Carafa Specjal           | 0.2 kg (3.4%) | 65 %   | 1000 |

## Hops

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

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 40 g   | Safale     |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |         |        |      |        |
|-------|---------|--------|------|--------|
| Other | Laktoza | 0.75 g | Boil | 15 min |
|-------|---------|--------|------|--------|