

# Milk Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **40**
- SRM **26.5**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt         | 4.5 kg (70.9%) | 80 %  | 7    |
| Sugar | laktoza                        | 0.5 kg (7.9%)  | 80 %  | ---  |
| Grain | Brown Malt (British Chocolate) | 0.25 kg (3.9%) | 70 %  | 128  |
| Grain | Weyermann - Chocolate Wheat    | 0.25 kg (3.9%) | 74 %  | 788  |
| Grain | Carafa III                     | 0.25 kg (3.9%) | 70 %  | 1034 |
| Grain | Caramel/Crystal Malt - 30L     | 0.1 kg (1.6%)  | 75 %  | 59   |
| Grain | Platki owsiane                 | 0.5 kg (7.9%)  | 60 %  | 3    |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 30 g   | 60 min | 13.9 %     |
| Aroma (end of boil) | East Kent Goldings     | 25 g   | 5 min  | 5.1 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                         |     |        |        |             |
|-------------------------|-----|--------|--------|-------------|
| Wyeast - 1084 Irish Ale | Ale | Liquid | 100 ml | Wyeast Labs |
|-------------------------|-----|--------|--------|-------------|