

# stout mleczny

- Gravity **14.7 BLG**
- ABV ---
- IBU **38**
- SRM **34.6**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield  | EBC  |
|-------|--------------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale        | 3.5 kg (52.6%) | 79 %   | 6    |
| Grain | Strzegom Pszeniczny      | 0.5 kg (7.5%)  | 81 %   | 6    |
| Grain | Strzegom Karmel 600      | 0.25 kg (3.8%) | 68 %   | 601  |
| Grain | Strzegom Czekoladowy 400 | 0.5 kg (7.5%)  | 68 %   | 400  |
| Grain | Barley, Flaked           | 0.4 kg (6%)    | 70 %   | 4    |
| Grain | Strzegom Barwiący        | 0.1 kg (1.5%)  | 68 %   | 1300 |
| Sugar | Milk Sugar (Lactose)     | 1 kg (15%)     | 76.1 % | 0    |
| Grain | Rye, Flaked              | 0.4 kg (6%)    | 78.3 % | 4    |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | lunga             | 30 g   | 60 min | 11 %       |
| Boil    | Lublin (Lubelski) | 30 g   | 30 min | 4 %        |

## Yeasts

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

|       |     |       |       |         |
|-------|-----|-------|-------|---------|
| us-05 | Ale | Slant | 20 ml | Danstar |
|-------|-----|-------|-------|---------|