

# MILK STOUT Z WIŚNIAMI 13 BLG # 52

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **35**
- SRM **31**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

| Type  | Name                            | Amount         | Yield  | EBC  |
|-------|---------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt            | 1 kg (18.6%)   | 80 %   | 5    |
| Grain | Weyermann - Pale Ale Malt       | 3 kg (55.8%)   | 85 %   | 7    |
| Grain | Czekoladowy Castlemalting       | 0.3 kg (5.6%)  | --- %  | 900  |
| Grain | Ziarno Jęczmienia Castlemalting | 0.3 kg (5.6%)  | --- %  | 1200 |
| Grain | Płatki owsiane                  | 0.5 kg (9.3%)  | 85 %   | 3    |
| Sugar | Milk Sugar (Lactose)            | 0.28 kg (5.2%) | 76.1 % | 0    |

## Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Izabella | 45 g   | 60 min | 5.1 %      |
| Boil    | Zula     | 15 g   | 60 min | 8.3 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |

## Extras

| Type   | Name    | Amount | Use for   | Time     |
|--------|---------|--------|-----------|----------|
| Flavor | Wiśnie  | 900 g  | Secondary | 7 day(s) |
| Spice  | Laktoza | 0.28 g | Boil      | 10 min   |