

# Owsiany Milk Stout

- Gravity **15.2 BLG**
- ABV ---
- IBU **16**
- SRM **37.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **51 C**, Time **20 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.2 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **20 min** at **51C**
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount         | Yield  | EBC  |
|-------|-------------------------------|----------------|--------|------|
| Grain | Viking melanoidynowy          | 0.5 kg (6.7%)  | 75 %   | 60   |
| Grain | Strzegom Monachijski typ I    | 4 kg (53.7%)   | 79 %   | 16   |
| Grain | Strzegom Czekoladowy ciemny   | 0.5 kg (6.7%)  | 68 %   | 1200 |
| Grain | Strzegom Karmel 600           | 0.25 kg (3.4%) | 68 %   | 600  |
| Grain | Słód owsiany Fawcett          | 0.3 kg (4%)    | 61 %   | 5    |
| Grain | Acid Malt                     | 0.1 kg (1.3%)  | 58.7 % | 6    |
| Grain | Viking Pale Ale malt colorado | 1 kg (13.4%)   | 80 %   | 5    |
| Sugar | Milk Sugar (Lactose)          | 0.7 kg (9.4%)  | 76.1 % | 0    |
| Grain | Jęczmień palony               | 0.1 kg (1.3%)  | 55 %   | 985  |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|------|------------|
|---------|------|--------|------|------------|

|                     |             |      |        |       |
|---------------------|-------------|------|--------|-------|
| Boil                | Marynka     | 15 g | 30 min | 10 %  |
| Aroma (end of boil) | Golding     | 30 g | 5 min  | 5 %   |
| Aroma (end of boil) | Huell Melon | 30 g | 5 min  | 7.5 % |

## Yeasts

| Name      | Type | Form | Amount | Laboratory      |
|-----------|------|------|--------|-----------------|
| yeast bay | Ale  | Dry  | 11 g   | Mangrove Jack's |