

# Milk Stout z Bobem Tonka (+ gryka)

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **22**
- SRM **26.1**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **19.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **11.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **76C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | pale ale zero Viking             | 2.5 kg (62.5%) | 79 %   | 6    |
| Grain | Słód Caramunich Typ II Weyermann | 0.25 kg (6.3%) | 73 %   | 120  |
| Grain | Strzegom Czekoladowy ciemny      | 0.15 kg (3.8%) | 68 %   | 1200 |
| Grain | Płatki jęczmienne                | 0.2 kg (5%)    | 85 %   | 3    |
| Grain | Weyermann - Carafa I             | 0.15 kg (3.8%) | 70 %   | 690  |
| Sugar | Milk Sugar (Lactose)             | 0.25 kg (6.3%) | 76.1 % | 0    |
| Grain | Gryka                            | 0.5 kg (12.5%) | 70 %   | ---  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 15 g   | 60 min | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Safale     |