

# Świąteczny Imperialny Milk stout

- Gravity **17.5 BLG**
- ABV ---
- IBU **27**
- SRM **26.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield  | EBC |
|-------|--------------------------|----------------|--------|-----|
| Grain | Pilzneński               | 4.5 kg (65.2%) | 81 %   | 4   |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (7.2%)  | 71 %   | 600 |
| Grain | iking Malt armel sweet   | 1 kg (14.5%)   | 78 %   | 70  |
| Grain | Płatki owsiane           | 0.3 kg (4.3%)  | 85 %   | 3   |
| Grain | Carafa specjal I         | 0.1 kg (1.4%)  | 65 %   | 800 |
| Sugar | Milk Sugar (Lactose)     | 0.5 kg (7.2%)  | 76.1 % | 0   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 30 g   | 45 min | 11 %       |

## Yeasts

| Name        | Type | Form   | Amount | Laboratory |
|-------------|------|--------|--------|------------|
| Safale S-04 | Ale  | Liquid | 250 ml | gęstwa     |

## Extras

| Type   | Name  | Amount | Use for   | Time      |
|--------|---|--------|-----------|-----------|
| Flavor | imbir (świeży)                                  | 10 g   | Secondary | 5 day(s)  |
| Herb   | Vanilia laska (1 szt)<br>moczone w burbonie     | 1 g    | Secondary | 5 day(s)  |
| Flavor | tonka - nasiona 8 gr<br>- moczone w<br>burbonie | 8 g    | Secondary | 5 day(s)  |
| Flavor | płatki kokosowe<br>(odtłuszczone)               | 20 g   | Secondary | 5 day(s)  |
| Flavor | banan pieczony                                  | 1500 g | Secondary | 14 day(s) |
| Flavor | ksylitol - do smaku                             | 1 g    | Bottling  | ---       |