

## #VI Świąteczny słodki stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **15**
- SRM **28.3**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield  | EBC  |
|-------|-----------------------------|----------------|--------|------|
| Grain | Colorado pale ale           | 1 kg (18.7%)   | 79 %   | 6    |
| Grain | Pale ale Holycon            | 1 kg (18.7%)   | 80.3 % | 5.3  |
| Grain | Strzegom Pale Ale           | 1 kg (18.7%)   | 79 %   | 6    |
| Grain | Monachijski                 | 1 kg (18.7%)   | 80 %   | 16   |
| Grain | Słód Caramel Sweet          | 0.4 kg (7.5%)  | 75 %   | 60   |
| Grain | Barley, Flaked              | 0.5 kg (9.3%)  | 70 %   | 4    |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (5.6%)  | 68 %   | 1200 |
| Grain | Black Barley (Roast Barley) | 0.15 kg (2.8%) | 55 %   | 985  |

### Hops

| Use for             | Name             | Amount | Time   | Alpha acid |
|---------------------|------------------|--------|--------|------------|
| Boil                | Styrian Goldings | 10 g   | 55 min | 5.2 %      |
| Boil                | Styrian Goldings | 15 g   | 40 min | 5.2 %      |
| Aroma (end of boil) | Styrian Goldings | 15 g   | 10 min | 5.2 %      |

## Yeasts

| Name               | Type | Form | Amount | Laboratory |
|--------------------|------|------|--------|------------|
| Mauribrew Ale Y514 | Ale  | Dry  | 12.5 g | Mauribrew  |

## Extras

| Type   | Name                 | Amount | Use for   | Time      |
|--------|----------------------|--------|-----------|-----------|
| Flavor | skórka pomarańczy    | 60 g   | Boil      | 10 min    |
| Flavor | śliwki suszone       | 80 g   | Boil      | 10 min    |
| Spice  | kardamon             | 3 g    | Boil      | 10 min    |
| Spice  | goździki             | 3 g    | Boil      | 10 min    |
| Spice  | gałka muszkatałowa   | 4 g    | Boil      | 10 min    |
| Flavor | Milk Sugar (Lactose) | 570 g  | Boil      | 10 min    |
| Fining | whirlfoc             | 2 g    | Boil      | 10 min    |
| Spice  | cynamon              | 4 g    | Secondary | 14 day(s) |
| Spice  | gałka muszkatałowa   | 1 g    | Secondary | 14 day(s) |
| Spice  | goździki             | 3 g    | Secondary | 14 day(s) |
| Spice  | kardamon             | 2 g    | Secondary | 14 day(s) |

## Notes

- wdało się zakażenie = zlew  
*Dec 18, 2018, 8:11 PM*