

Świąteczne v2

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **39**
- SRM **43**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **68.5 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **80 min** at **68.5C**
- Keep mash **10 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt | 2 kg (25.8%) | 80 % | 5 |
| Grain | Monachijski Ciemny Steinbach | 1 kg (12.9%) | 100 % | 30 |
| Grain | Monachijski | 1 kg (12.9%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 1 kg (12.9%) | 79 % | 10 |
| Grain | Płatki owsiane | 0.75 kg (9.7%) | 60 % | 3 |
| Grain | Viking Czekoladowy ciemny | 0.5 kg (6.5%) | 67 % | 900 |
| Grain | Fawcett - Pale Chocolate | 0.5 kg (6.5%) | 71 % | 600 |
| Grain | Carafa III | 0.25 kg (3.2%) | 70 % | 1034 |
| Sugar | Milk Sugar (Lactose) | 0.75 kg (9.7%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 30 g | 60 min | 12 % |
| Boil | Magnum | 20 g | 10 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-----|-----|------|-----------|
| US-05 | Ale | Dry | 20 g | Fermentis |
|-------|-----|-----|------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|-----------|-----------|
| Flavor | cocoa nibs | 150 g | Secondary | 14 day(s) |