

# 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
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US-05	Ale	Dry	20 g	Fermentis
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### Extras

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