

# Świąteczne

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **11**
- SRM **27**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **19 liter(s)**

## Steps

- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **81.3C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (36.4%)	81 %	4
Grain	Monachijski	1 kg (18.2%)	80 %	16
Grain	Strzegom Wiedeński	1 kg (18.2%)	79 %	10
Grain	Caraaroma	0.2 kg (3.6%)	78 %	400
Grain	Caramel/Crystal Malt - 120L	0.2 kg (3.6%)	72 %	236
Grain	Special B Malt	0.2 kg (3.6%)	65.2 %	315
Grain	Brown Malt (British Chocolate)	0.2 kg (3.6%)	70 %	128
Grain	Fawcett - Pale Chocolate	0.2 kg (3.6%)	71 %	600
Sugar	Maltodekstryna	0.5 kg (9.1%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	8 g	60 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's Kveik M12	Ale	Dry	11.5 g	---
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## Notes

- Dodatki: cynamon, wanilia, goździki  
*Nov 23, 2020, 11:06 PM*