

# Świąteczne

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **20**
- SRM **22.9**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.3 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **23.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **74C**
- Keep mash **0 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneski	5.5 kg (66.1%)	--- %	4
Grain	Strzegom Pszeniczny	1 kg (12%)	81 %	6
Grain	Caraaroma	0.3 kg (3.6%)	78 %	400
Grain	Carafa 1	0.2 kg (2.4%)	70 %	664
Grain	Jęczmień palony	0.12 kg (1.4%)	55 %	985
Grain	Strzegom Czekoladowy 400	0.2 kg (2.4%)	68 %	400
Grain	Płatki owsiane	0.5 kg (6%)	85 %	3
Sugar	Cukier trzcinowy	0.5 kg (6%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	30 g	60 min	8.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
SafAle t-58	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon cięty	20 g	Boil	10 min
Flavor	Korzeń lukrecji	40 g	Boil	10 min
Flavor	Skórka pomarańczy	300 g	Boil	10 min
Flavor	Śliwki suszone	200 g	Boil	10 min
Flavor	Trawa cytrynowa	10 g	Boil	10 min

## Notes

- Dodatkowo  
4 goździki na 10 min przed końcem  
1 laska cynamonu również 10 min przed końcem  
Skórka pomarańczy - z trzech sztuk  
*Dec 18, 2018, 10:52 AM*