

## Świąteczne 3

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **35**
- SRM **16**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **22.1 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **75C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	3 kg (40.7%)	79 %	22
Grain	Strzegom Pilzneński	1.8 kg (24.4%)	80 %	4
Grain	Pszeniczny	1 kg (13.6%)	85 %	4
Grain	Strzegom Wiedeński	0.5 kg (6.8%)	79 %	10
Grain	Płatki owsiane	0.4 kg (5.4%)	85 %	3
Grain	Strzegom Karmel 30	0.3 kg (4.1%)	75 %	30
Grain	Strzegom Karmel 150	0.275 kg (3.7%)	75 %	150
Grain	Jęczmień palony	0.09 kg (1.2%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Polaris	21 g	60 min	19 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Fermentis Safale T-58	Ale	Dry	11 g	---
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### Extras

Type	Name	Amount	Use for	Time
Spice	cukier wanilinowy	2 g	Boil	10 min
Spice	cynamon mielony	8 g	Boil	10 min
Spice	gałka muszkatałowa	6 g	Boil	10 min
Flavor	śliwki suszone	200 g	Boil	10 min
Spice	goździki 6szt	0 g	Boil	10 min
Flavor	imbir plastry	30 g	Boil	10 min
Spice	pieprz 8szt	0 g	Boil	10 min
Spice	ziele angielskie 8szt	0 g	Boil	10 min
Flavor	skórka z 3 pomarańczy	0 g	Boil	10 min
Spice	laska wanilii	0 g	Secondary	10 day(s)
Spice	laska cynamonu	0 g	Secondary	10 day(s)