

# Świąteczne Ale

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **22**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **35 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **31 liter(s)**
- Total mash volume **38.7 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **74 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **31 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **25 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **35 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.6 kg (54.4%)	80 %	4
Grain	Strzegom Pszeniczny	1.5 kg (17.8%)	81 %	6
Grain	Strzegom Karmel 150	0.4 kg (4.7%)	75 %	150
Grain	Strzegom Karmel 300	0.35 kg (4.1%)	70 %	299
Grain	Jęczmień palony	0.2 kg (2.4%)	55 %	985
Grain	Strzegom Barwiący	0.1 kg (1.2%)	68 %	1300
Grain	Płatki owsiane	0.6 kg (7.1%)	85 %	3
Sugar	Cukier biały	0.7 kg (8.3%)	99 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	8.8 %
Boil	East Kent Goldings	25 g	10 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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safale t-58	Ale	Dry	23 g	---
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### Extras

Type	Name	Amount	Use for	Time
Spice	cukier waniliowy	20 g	Boil	10 min
Spice	cynamon	10 g	Boil	10 min
Spice	gałka muskatołowa	8 g	Boil	10 min
Flavor	śliwki suszone	150 g	Boil	10 min
Spice	goździki całe	10 g	Boil	10 min
10szt.				
Flavor	skórka z pomarańczy	3 g	Boil	10 min
3szt.				