

# Świąteczne Ale

- Gravity **17.3 BLG**
- ABV ---
- IBU **27**
- SRM **27.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **22.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (60%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (13.3%)	80 %	22
Grain	Viking malt wędzony czereśnia	1 kg (13.3%)	80 %	5
Grain	Karmelowy Pszenciczny Strzegom	0.5 kg (6.7%)	79 %	130
Grain	Strzegom Czekoladowy jasny	0.5 kg (6.7%)	1 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	lunga	20 g	10 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Spice	Przyprawa do piernika	20 g	Boil	10 min
Spice	Skórka pomarańczy	15 g	Boil	10 min
Spice	Skórka suszona Curacao	20 g	Boil	10 min
Spice	Cukier wanilinowy	15 g	Boil	10 min