

# Świąteczne 2024

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **11**
- SRM **13.6**

## 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 **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **72 C**, Time **30 min**
- Temp **68 C**, Time **15 min**

## Mash step by step

- Heat up **20.6 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **15 min** at **68C**
- Keep mash **30 min** at **72C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (58.3%)	80 %	5
Grain	Weyermann - Carawheat	1 kg (19.4%)	77 %	97
Grain	Żytni	0.65 kg (12.6%)	85 %	8
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (9.7%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	30 g	60 min	3.5 %

## Extras

Type	Name	Amount	Use for	Time
Spice	kardamon	2 g	Boil	15 min
Spice	imbir	15 g	Boil	15 min
Spice	cynamon kora	6 g	Boil	15 min
Spice	gałka muszkatowa	6 g	Boil	15 min
Spice	ziele angielskie	2 g	Boil	15 min

## Notes

- kardamon 8 ziarenek i 8 ziarenek ziola angielskiego.  
*Oct 19, 2024, 11:38 AM*