

# Popierdolony pierniczek - Christmas Ale 2022

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **15**
- SRM **24.9**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.9 liter(s)**

## Steps

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

## Mash step by step

- Heat up **13.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (63.3%)	80 %	5
Grain	Strzegom Pilzniejszy	0.7 kg (17.7%)	80 %	4
Grain	Viking Caramel	0.2 kg (5.1%)	80 %	300
Grain	Strzegom Czekoladowy jasny	0.2 kg (5.1%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.15 kg (3.8%)	68 %	1200
Liquid Extract	Honey	0.2 kg (5.1%)	75 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	15 g	20 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	22 g	Boil	10 min
Spice	Kardamon	5.5 g	Boil	10 min

Spice	Goździk	5.5 g	Boil	10 min
Spice	Imbir	5.5 g	Boil	10 min
Spice	Skórka cytryny	11 g	Boil	1 min
Spice	Skórka pomarańczy	11 g	Boil	1 min