

# Christmas Ale

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **21**
- SRM **16.2**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.09 kg (65%)	85 %	7
Grain	Biscuit Malt	0.26 kg (8.1%)	79 %	45
Grain	Abbey Malt Weyermann	0.52 kg (16.3%)	75 %	45
Grain	Carafa II	0.08 kg (2.4%)	70 %	1100
Grain	Platki owsiane	0.26 kg (8.1%)	85 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10.43 g	30 min	12 %
Aroma (end of boil)	Amarillo	15.65 g	7 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5.74 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	skórka pomarańczowa	10.43 g	Boil	20 min
Spice	Przyprawa do piernika	10.43 g	Boil	20 min
Spice	imbir	5.22 g	Boil	20 min
Spice	Przyprawa do piernika	10.43 g	Secondary	3 day(s)
Spice	imbir	5.22 g	Secondary	3 day(s)