Christmas Ale

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **33**
- SRM **16**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **24.6 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 **18.5 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 **16.7 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg *(65%)*	85 %	7
Grain	Biscuit Malt	0.5 kg *(8.1%)*	79 %	45
Grain	Abbey Malt Weyermann	1 kg *(16.3%)*	75 %	45
Grain	Carafa II	0.15 kg *(2.4%)*	70 %	1100
Grain	Płatki owsiane	0.5 kg *(8.1%)*	85 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	35 g	30 min	12 %
Aroma (end of boil)	Amarillo	30 g	7 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	skórka pomarańczowa	20 g	Boil	20 min
Spice	Przyprawa do piernika	20 g	Boil	20 min
Spice	imbir	10 g	Boil	20 min
Spice	Przyprawa do piernika	20 g	Secondary	3 day(s)
Spice	imbir	10 g	Secondary	3 day(s)