

Christmas Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **21.7**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **7.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1 kg (41.7%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (20.8%)	83 %	5
Grain	Weyermann - Carafa I	0.2 kg (8.3%)	70 %	690
Grain	Viking melanoidynowy	0.5 kg (20.8%)	75 %	60
Grain	Caramel/Crystal Malt - 10L	0.2 kg (8.3%)	75 %	20

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Flavor	Cynamon	15 g	Boil	20 min
Flavor	pomarańcza skórka	1 g	Boil	20 min
Flavor	przyprawa do piernika opak	1 g	Boil	20 min
Flavor	goździki kilka szt.	1 g	Boil	20 min
Flavor	gałka muskatołowa 1 łyżeczka	1 g	Boil	20 min