

Chrimstmas Ale

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **21**
- SRM **27.5**
- Style **Spice, Herb, or Vegetable Beer**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **12.5 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	5 kg (78.1%)	80 %	5
Grain	Viking Munich Malt	0.5 kg (7.8%)	78 %	18
Grain	Płatki owsiane	0.4 kg (6.3%)	60 %	3
Grain	Viking Czekoladowy ciemny	0.25 kg (3.9%)	67 %	900
Grain	Jęczmień palony	0.25 kg (3.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	50 g	60 min	3.5 %
Boil	Oktawia	30 g	5 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką kratę	Ale	Liquid	1000 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Spice	goździki	5 g	Boil	5 min
Spice	Przyprawa korzenna	10 g	Boil	5 min
Spice	suszone owoce cytrusowe	15 g	Boil	5 min