

# Christmas Ale

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **39**
- SRM **11.6**
- Style **Christmas/Winter Specialty Spiced 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **12.3 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	4 kg (61.5%)	80 %	5
Grain	Vienna Malt	2 kg (30.8%)	78 %	8
Grain	Weyermann - Carapils	0.25 kg (3.8%)	78 %	4
Grain	Caraaroma	0.25 kg (3.8%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Mandarina Bavaria	30 g	60 min	10 %
Boil	Mandarina Bavaria	20 g	10 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Mandarynki	1000 g	Secondary	7 day(s)

Flavor	Pomarańcze	1000 g	Secondary	7 day(s)
Herb	Rozmaryn	50 g	Secondary	7 day(s)