

# Christmas Ale

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **38**
- SRM **21.1**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **0 %**
- Size with trub loss **30 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **35 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **33.1 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **74 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **24.2 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **74C**
- Keep mash **0 min** at **78C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **35 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (33.5%)	80 %	5
Grain	Strzegom Pilzneński	2 kg (22.3%)	80 %	4
Grain	Strzegom Monachijski typ II	2 kg (22.3%)	79 %	22
Grain	Strzegom Pszeniczny	1 kg (11.2%)	81 %	6
Grain	Płatki owsiane	0.4 kg (4.5%)	85 %	3
Grain	Karmelowy żytni Strzegom	0.25 kg (2.8%)	75 %	300
Grain	Weyermann - Carafa II	0.3 kg (3.4%)	70 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	8.8 %
Boil	Willamette	50 g	15 min	5.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M41 Belgian Ale	Ale	Dry	22.5 g	Mangrove Jack's
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### Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	10 g	Boil	10 min
Spice	Goździki	12 g	Boil	10 min
Spice	Gałka muskatołowa	8 g	Boil	10 min
Flavor	Skórka pomarańczy	20 g	Boil	10 min
Flavor	Cukier Waniliowy	25 g	Boil	10 min
Spice	Laska wanilii	2 g	Boil	10 min
Fining	mech irlandzki	8 g	Boil	10 min