

# Christmas Ale

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **39**
- SRM **16.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (63.6%)	80 %	5
Grain	Pszeniczny	1 kg (18.2%)	85 %	4
Grain	Płatki owsiane	0.4 kg (7.3%)	85 %	3
Grain	Strzegom Karmel 150	0.3 kg (5.5%)	75 %	150
Grain	Strzegom Karmel 600	0.2 kg (3.6%)	68 %	601
Grain	Viking Cookie	0.1 kg (1.8%)	75 %	50

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM25 Klasztorna medytacja	Ale	Liquid	100 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Imbir świeży	5 g	Boil	30 min
Spice	Whirfloc	1 g	Boil	10 min
Spice	Gałka muszkatołowa	2 g	Boil	10 min
Spice	Cynamon mielony	3 g	Boil	10 min
Spice	Kardamon	1 g	Boil	10 min
Spice	Skórka pomarańczy (szt)	3 g	Boil	10 min
Spice	Laska wanilii	5 g	Boil	10 min
Spice	Goździki całe (szt)	5 g	Boil	10 min
Spice	Kora cynamonowa	5 g	Secondary	3 day(s)
Spice	Aromat rumowy	1 g	Bottling	---