

# Christmas Ale

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **25**
- SRM **35.5**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **64 C**, Time **20 min**
- Temp **74 C**, Time **40 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **71.9C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **74C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (44.1%)	81 %	4
Grain	Monachijski	2 kg (29.4%)	80 %	16
Grain	Pszeniczny	0.5 kg (7.4%)	85 %	4
Grain	Płatki owsiane	0.5 kg (7.4%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.4 kg (5.9%)	68 %	1200
Grain	Strzegom Karmel 600	0.4 kg (5.9%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	cynamon	25 g	Boil	10 min
Spice	imbir	20 g	Boil	10 min
Spice	gałka muskatołowa	3 g	Boil	10 min
Spice	cukier wanilinowy	16 g	Boil	10 min
Spice	miód 2 łyżki	30 g	Boil	10 min
Spice	goździki 20szt.	5 g	Boil	10 min
Spice	skórka z 3 pomarańczy	10 g	Boil	10 min