

# Christmas Ale

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- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **51.7**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **4.4 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.2 kg (38.7%)	80 %	5
Grain	Strzegom Monachijski typ I	0.6 kg (19.4%)	79 %	16
Grain	Strzegom Bursztynowy	0.3 kg (9.7%)	70 %	49
Grain	Pszeniczny Czekoladowy	0.3 kg (9.7%)	73 %	1001
Grain	Strzegom Karmel 30	0.1 kg (3.2%)	75 %	30
Grain	Strzegom Karmel 600	0.1 kg (3.2%)	68 %	601
Grain	Carafa Special III	0.1 kg (3.2%)	70 %	1400
Grain	Płatki owsiane	0.4 kg (12.9%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	5 g	Boil	5 min
Spice	Goździki	2 g	Boil	5 min
Spice	Gałka muskatołowa	3 g	Boil	5 min
Spice	Imbir	3 g	Boil	5 min
Spice	Skórka pomarańczy	10 g	Boil	5 min
Spice	Laktoza	300 g	Boil	5 min