

Christmas Ale

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **18**
- SRM **26.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **2 %**
- Size with trub loss **25.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (64.3%)	82 %	4
Grain	Strzegom Monachijski typ I	1 kg (14.3%)	79 %	16
Grain	Strzegom Karmel 150	0.2 kg (2.9%)	75 %	150
Grain	Strzegom Karmel 300	0.2 kg (2.9%)	70 %	299
Grain	Strzegom Czekoladowy 400	0.4 kg (5.7%)	68 %	400
Grain	Strzegom Barwiący	0.2 kg (2.9%)	68 %	1300
Grain	Słód diastatyczny	0.5 kg (7.1%)	90 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga (PL)	7 g	60 min	11 %
Boil	Lubelski (PL)	50 g	30 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	Przyprawy (piernikowe)	100 g	Boil	10 min