

Christmas Ale

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **21.5**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **10.9 liter(s)**
- Total mash volume **14.3 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.9 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.25 kg (66.2%)	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg (14.7%)	79 %	16
Grain	Płatki owsiane	0.25 kg (7.4%)	85 %	3
Grain	Biscuit Malt	0.25 kg (7.4%)	79 %	45
Grain	Strzegom Czekoladowy ciemny	0.15 kg (4.4%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Saaz (Czech Republic)	25 g	20 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Skórka Pomarańczy (szt)	2 g	Boil	20 min
Spice	Cynamon(kora) (szt)	1 g	Boil	20 min
Spice	Goździki (szt)	5 g	Boil	20 min
Spice	Imbir	8 g	Boil	20 min
Spice	Cukier Trzcinowy	60 g	Boil	20 min
Spice	Skórka Pomarańczy słodka suszona (szt)	20 g	Secondary	4 day(s)
Spice	Szkórka pomarańczy Curacao suszona	20 g	Secondary	4 day(s)
Spice	Laska Wanilii (szt)	1 g	Secondary	4 day(s)
Spice	Cynamon kora (szt)	2 g	Secondary	4 day(s)