

Christmas Ale

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **25**
- SRM **16.8**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **24.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Viking	5 kg (61%)	80 %	4
Grain	Pszeniczny Viking	1.5 kg (18.3%)	75 %	5
Grain	Pale Ale Viking	0.5 kg (6.1%)	80 %	6
Grain	Płatki owsiane	1 kg (12.2%)	85 %	3
Grain	Pszeniczny Czekoladowy Weyermann	0.1 kg (1.2%)	74 %	1100
Grain	Jęczmienny Czekoladowy Viking	0.1 kg (1.2%)	70 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.7 %
Boil	Hallertau Tradition	30 g	10 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	10 g	Boil	10 min
Spice	Skórka z pomarańczy	100 g	Boil	10 min
Spice	Hibiskus	20 g	Boil	10 min
Spice	Anyż	5 g	Boil	10 min
Spice	Lukrecja	10 g	Boil	10 min
Spice	Imbir	10 g	Boil	10 min
Spice	Goździki	2 g	Boil	10 min
15 sztuk				