

# Christmas Spices Ale

- Gravity **16.8 BLG**
- ABV ---
- IBU **27**
- SRM **34.1**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.8 liter(s)**

## Steps

- Temp **53 C**, Time **15 min**
- Temp **65 C**, Time **40 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (42.7%)	80 %	5
Grain	Strzegom Pilzneński	2 kg (24.4%)	80 %	4
Grain	Monachijski	1 kg (12.2%)	80 %	16
Grain	Jęczmień palony	0.4 kg (4.9%)	55 %	985
Grain	Biscuit Malt	0.2 kg (2.4%)	79 %	45
Grain	Caramel/Crystal Malt - 30L	0.1 kg (1.2%)	75 %	59
Grain	Strzegom Czekoladowy ciemny	0.3 kg (3.7%)	68 %	1200
Liquid Extract	Miód Gryczany (Buckwheat Honey)	0.5 kg (6.1%)	70 %	40
Grain	Płatki owsiane	0.2 kg (2.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11.9 %
Aroma (end of boil)	East Kent Goldings	25 g	10 min	5.1 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	20 g	Boil	10 min
Spice	Goździki	8 g	Boil	10 min
Spice	Cukier waniliowy	30 g	Boil	10 min
Spice	Gałka muszkatałowa	6 g	Boil	10 min
Spice	Imbir	15 g	Boil	10 min
Spice	Kardamon	8 g	Boil	10 min
Spice	Kolendra	1 g	Boil	10 min
Spice	Liść laurowy	0.5 g	Boil	10 min
Flavor	Skórka mandarynki	20 g	Boil	10 min