

## Christmas Ale #2

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **34**
- SRM **24.5**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.7 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **66 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **10 min** at **66C**
- Keep mash **70 min** at **67C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilzneński CastleMalting	4 kg (54.9%)	81 %	3.5
Grain	Słód Pszeniczny Heidelberg	1.21 kg (16.6%)	82 %	3.5
Grain	Płatki Owsiane	0.61 kg (8.4%)	85 %	3
Grain	Słód Karmelowy Strzegom	0.36 kg (4.9%)	75 %	150
Grain	Słód Karmelowy Strzegom	0.24 kg (3.3%)	70 %	300
Grain	Jęczmień palony	0.15 kg (2.1%)	55 %	985
Dodany po 70 min zacierania				
Grain	Strzegom Barwiący	0.1 kg (1.4%)	68 %	1300
Dodany po 70 min zacierania				
Sugar	Cukier	0.61 kg (8.4%)	100 %	0
Dodany na ostatnie 10 minut gotowania				

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	36.36 g	60 min	8.8 %
Boil	Lublin (Lubelski)	24.24 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale T-58	Ale	Dry	27.88 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Cukier waniliowy	60.61 g	Boil	10 min
Spice	Śliwki suszone posiekane	242.42 g	Boil	10 min
Spice	Gałka muskatołowa	6.06 g	Boil	10 min
Spice	Skórka z 2 dużych pomarańczy	0 g	Boil	10 min
Spice	Przyprawa do piernika KAMIS	24.24 g	Boil	10 min
Spice	Goździki 6szt	0 g	Boil	10 min