

# CHRISTMAS TIME ALE # 5

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **43**
- SRM **19.3**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **53 C**, Time **15 min**
- Temp **68 C**, Time **50 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **50 min** at **68C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (58%)	80 %	5
Grain	Weyermann - Light Munich Malt	1 kg (14.5%)	82 %	14
Grain	Caramel/Crystal Malt - 10L	0.5 kg (7.2%)	75 %	20
Grain	Carahell	0.3 kg (4.3%)	77 %	26
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.9%)	68 %	400
Grain	Weyermann - Carafa I	0.2 kg (2.9%)	70 %	690
Liquid Extract	miód gryczany	0.7 kg (10.1%)	80 %	40

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	60 min	10 %
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Willamette	25 g	10 min	5 %

## Yeasts

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

Type	Name	Amount	Use for	Time
Spice	kardamon	3 g	Boil	10 min
Spice	anyż	4 g	Boil	10 min
Spice	goździki	3 g	Boil	10 min
Fining	mech irlandzki	5 g	Boil	10 min
Spice	cynamon	20 g	Boil	10 min
Spice	gałka muszkatołowa	3 g	Boil	10 min
Spice	skórka z pomarańczy	5 g	Boil	10 min