

# WaChristmas

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **15**
- SRM **15.9**
- 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **3 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **3 min** at **77C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (76.9%)	81 %	4
Grain	Biscuit Malt	1 kg (15.4%)	79 %	45
Grain	Fawcett - Dark Crystal	0.4 kg (6.2%)	71 %	300
Grain	Fawcett - Pale Chocolate	0.1 kg (1.5%)	71 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale T-58	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
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Spice	Goździki	7 g	Boil	10 min
Spice	Skórka pomarańczy	2 g	Boil	10 min
Spice	Cynamon	4 g	Boil	10 min
Spice	Kardamon	4 g	Boil	10 min

## Notes

- Przyprawy korzenne dodawane na ostatnie 10min gotowania:

- Goździki - 10szt.,
- Suszona skórka z trzech pomarańczy,
- Cynamon w laskach - 4szt.,
- Kardamon - 1 łyżeczka,
- Gałka muszkatowa - 1 łyżeczka

Dodatkowo na cichą:

- Przyprawa do piernika - 8g.

*Oct 11, 2020, 11:34 PM*