

# WaChristmas 2021

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **20**
- SRM **11**
- 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 **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **23.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **1 min**

## Mash step by step

- Heat up **17.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **75C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	3 kg (50.4%)	81 %	4
Grain	Biscuit Malt	1 kg (16.8%)	79 %	45
Grain	Pszeniczny	1.5 kg (25.2%)	85 %	4
Grain	Fawcett - Crystal Pszeniczny	0.25 kg (4.2%)	70 %	160
Grain	Strzegom Karmel 150	0.2 kg (3.4%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Aroma (end of boil)	Huell Melon	25 g	15 min	6.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP028 - Edinburgh Scottish Ale Yeast	Ale	Liquid	40 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Suszone skórki pomarańczy Bergamotki	20 g	Boil	15 min
Spice	Przyprawa do piernika macerowana w whisky	15 g	Secondary	7 day(s)
Spice	Przyprawa do piernika	10 g	Boil	15 min