

# 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 |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |   |      |           |          |
|--------|---|------|-----------|----------|
| 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   |