

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

|              |     |     |        |           |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|

### 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 |