

## Christmas Ale #2

- Gravity **18.2 BLG**
- ABV ---
- IBU **31**
- SRM **24.1**
- Style **Christmas/Winter Specialty Spiced Beer**

### Batch size

- Expected quantity of finished beer **16.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **66 C**, Time **10 min**

### Mash step by step

- Heat up **18.2 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **10 min** at **66C**
- Keep mash **70 min** at **67C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **20.9 liter(s)** of wort

### Fermentables

| Type                                  | Name                          | Amount         | Yield | EBC  |
|---------------------------------------|-------------------------------|----------------|-------|------|
| Grain                                 | Słód Pilzneński CastleMalting | 3 kg (52.6%)   | 81 %  | 3.5  |
| Grain                                 | Słód Pszeniczny Heidelberg    | 1 kg (17.5%)   | 82 %  | 3.5  |
| Grain                                 | Płatki Owsiane                | 0.5 kg (8.8%)  | 85 %  | 3    |
| Grain                                 | Słód Karmelowy Strzegom       | 0.3 kg (5.3%)  | 75 %  | 150  |
| Grain                                 | Słód Karmelowy Strzegom       | 0.2 kg (3.5%)  | 70 %  | 300  |
| Grain                                 | Jęczmień palony               | 0.12 kg (2.1%) | 55 %  | 985  |
| Dodany po 70 min zacierania           |                               |                |       |      |
| Grain                                 | Strzegom Barwiący             | 0.08 kg (1.4%) | 68 %  | 1300 |
| Dodany po 70 min zacierania           |                               |                |       |      |
| Sugar                                 | Cukier                        | 0.5 kg (8.8%)  | 100 % | 0    |
| Dodany na ostatnie 10 minut gotowania |                               |                |       |      |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 8.8 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 10 min | 4 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale T-58 | Ale  | Dry  | 23 g   | ---        |

## Extras

| Type  | Name                         | Amount | Use for | Time   |
|-------|------------------------------|--------|---------|--------|
| Spice | Cukier waniliowy             | 50 g   | Boil    | 10 min |
| Spice | Śliwki suszone posiekane     | 200 g  | Boil    | 10 min |
| Spice | Gałka muskatołowa            | 5 g    | Boil    | 10 min |
| Spice | Skórka z 2 dużych pomarańczy | 0 g    | Boil    | 10 min |
| Spice | Przyprawa do piernika KAMIS  | 20 g   | Boil    | 10 min |
| Spice | Goździki 6szt                | 0 g    | Boil    | 10 min |