

Christmas Ale

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **18**
- SRM **26.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **2 %**
- Size with trub loss **25.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Viking Pilsner malt | 4.5 kg (64.3%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (14.3%) | 79 % | 16 |
| Grain | Strzegom Karmel 150 | 0.2 kg (2.9%) | 75 % | 150 |
| Grain | Strzegom Karmel 300 | 0.2 kg (2.9%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy 400 | 0.4 kg (5.7%) | 68 % | 400 |
| Grain | Strzegom Barwiący | 0.2 kg (2.9%) | 68 % | 1300 |
| Grain | Słód diastatyczny | 0.5 kg (7.1%) | 90 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|--------|------------|
| Boil | lunga (PL) | 7 g | 60 min | 11 % |
| Boil | Lubelski (PL) | 50 g | 30 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale | Slant | 150 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------------------------|---------------|----------------|-------------|
| Spice | Przyprawy (piernikowe) | 100 g | Boil | 10 min |