

Christmas Ale I

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **29**
- SRM **13.2**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4 kg (65%) | 85 % | 7 |
| Grain | Biscuit Malt | 0.5 kg (8.1%) | 79 % | 45 |
| Grain | Abbey Malt Weyermann | 1 kg (16.3%) | 75 % | 45 |
| Grain | Weyermann - Carafa I | 0.15 kg (2.4%) | 70 % | 690 |
| Grain | Platki owsiane | 0.5 kg (8.1%) | 85 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Citra | 30 g | 30 min | 12 % |
| Aroma (end of boil) | Amarillo | 30 g | 7 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------------------|--------|-----------|----------|
| Spice | skórka pomarańczowa | 20 g | Boil | 20 min |
| Spice | Przyprawa do piernika | 20 g | Boil | 20 min |
| Spice | imbir | 10 g | Boil | 20 min |
| Spice | Przyprawa do piernika | 20 g | Secondary | 3 day(s) |
| Spice | imbir | 10 g | Secondary | 3 day(s) |