

# Christmas Ale

---

- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **28**
- SRM **37.4**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **20.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **20.2 liter(s)**
- Total mash volume **26.7 liter(s)**

## Steps

- Temp **45 C**, Time **15 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **25 min**
- Temp **72 C**, Time **25 min**
- Temp **79 C**, Time **1 min**

## Mash step by step

- Heat up **20.2 liter(s)** of strike water to **49C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **25 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **20.5 liter(s)** of wort

## Fermentables

| Type  | Name                                  | Amount        | Yield | EBC  |
|---|---------------------------------------|---------------|-------|------|
| Grain   | Colorado Pale Base Malt - Viking Malt | 3 kg (40%)    | 80 %  | 12   |
| Grain   | Weyermann - Rye Malt                  | 1 kg (13.3%)  | 85 %  | 7    |
| Grain   | Colorado Honing Malt - Viking Malt    | 1 kg (13.3%)  | 85 %  | 12   |
| Grain   | Weyermann - Cararye                   | 1 kg (13.3%)  | 79 %  | 110  |
| Grain   | Weyermann - Chocolate Rye             | 0.2 kg (2.7%) | 20 %  | 493  |
| Grain   | Weyermann - Carafa II                 | 0.3 kg (4%)   | 70 %  | 1100 |
| Adjunct   | Miód Gryczany (Buckwheat Honey)       | 1 kg (13.3%)  | 70 %  | 40   |
| Dodane po chmieleniu                              |                                       |               |       |      |
| Adjunct   | Łuska ryżowa                          | 0 kg          | 1 %   | 0    |
| Namoczoną łuske wsypać na spód kadzi filtracyjnej |                                       |               |       |      |

## Hops

| Use for             | Name             | Amount | Time   | Alpha acid |
|---------------------|------------------|--------|--------|------------|
| Boil                | Ella (AUS)       | 15 g   | 40 min | 14.6 %     |
| Aroma (end of boil) | Willamette (USA) | 15 g   | 10 min | 4.5 %      |
| Aroma (end of boil) | Ella (AUS)       | 15 g   | 10 min | 14.6 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

## Extras

| Type     | Name                      | Amount | Use for | Time   |
|----------|---------------------------|--------|---------|--------|
| Fining   | Wirfloc T                 | 1.25 g | Boil    | 15 min |
| Spice    | Laski cynamonu            | 15 g   | Boil    | 10 min |
| Spice    | Gałka muskatołowa mielona | 5 g    | Boil    | 10 min |
| Spice    | Goździki                  | 20 g   | Boil    | 10 min |
| 16 sztuk |                           |        |         |        |
| Spice    | Skórka pomarańczy         | 100 g  | Boil    | 10 min |
| Spice    | Imbir cięty               | 5.5 g  | Boil    | 10 min |
| Spice    | Kardamon                  | 15 g   | Boil    | 10 min |

## Notes

- Goździki i kardamon w sztukach.

Następnym razem więcej przypraw.  
Nov 8, 2017, 4:08 PM