

# Christmas Ale

---

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **39**
- SRM **16.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **21.1 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (63.6%) | 80 %  | 5   |
| Grain | Pszeniczny           | 1 kg (18.2%)   | 85 %  | 4   |
| Grain | Płatki owsiane       | 0.4 kg (7.3%)  | 85 %  | 3   |
| Grain | Strzegom Karmel 150  | 0.3 kg (5.5%)  | 75 %  | 150 |
| Grain | Strzegom Karmel 600  | 0.2 kg (3.6%)  | 68 %  | 601 |
| Grain | Viking Cookie        | 0.1 kg (1.8%)  | 75 %  | 50  |

## Hops

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

## Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM25 Klasztorna medytacja | Ale  | Liquid | 100 ml | Fermentum Mobile |

## Extras

| Type  | Name                    | Amount | Use for   | Time     |
|-------|-------------------------|--------|-----------|----------|
| Spice | Imbir świeży            | 5 g    | Boil      | 30 min   |
| Spice | Whirfloc                | 1 g    | Boil      | 10 min   |
| Spice | Gałka muszkatołowa      | 2 g    | Boil      | 10 min   |
| Spice | Cynamon mielony         | 3 g    | Boil      | 10 min   |
| Spice | Kardamon                | 1 g    | Boil      | 10 min   |
| Spice | Skórka pomarańczy (szt) | 3 g    | Boil      | 10 min   |
| Spice | Laska wanilii           | 5 g    | Boil      | 10 min   |
| Spice | Goździki całe (szt)     | 5 g    | Boil      | 10 min   |
| Spice | Kora cynamonowa         | 5 g    | Secondary | 3 day(s) |
| Spice | Aromat rumowy           | 1 g    | Bottling  | ---      |