

# Christmas Ale

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **38**
- SRM **26.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

## Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt         | 6 kg (81.1%)   | 80 %  | 5   |
| Grain | Viking Munich Malt           | 0.5 kg (6.8%)  | 78 %  | 18  |
| Grain | Barley, Flaked               | 0.4 kg (5.4%)  | 70 %  | 4   |
| Grain | Black Barley (Roast Barley)  | 0.25 kg (3.4%) | 55 %  | 985 |
| Grain | Briess - Dark Chocolate Malt | 0.25 kg (3.4%) | 60 %  | 827 |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Aroma (end of boil) | Oktawia | 30 g   | 5 min  | 7.1 %      |
| Boil                | Sybilla | 100 g  | 59 min | 3.5 %      |
| Aroma (end of boil) | Sybilla | 50 g   | 5 min  | 3.5 %      |

## Yeasts

| Name            | Type | Form | Amount | Laboratory |
|-----------------|------|------|--------|------------|
| FM53 Voss kveik | Ale  | Dry  | 20 g   | FM         |

## Extras

| Type  | Name      | Amount | Use for | Time  |
|-------|-----------|--------|---------|-------|
| Spice | Przyprawy | 60 g   | Boil    | 5 min |