

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 |