

Speciality/Christmas

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **18**
- SRM **25.6**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **66 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 3 kg (74.8%) | 80 % | 5 |
| Grain | Caramel/Crystal Malt - 40L | 0.15 kg (3.7%) | 74 % | 79 |
| Grain | Biscuit Malt | 0.07 kg (1.7%) | 79 % | 45 |
| Grain | Aromatic Malt | 0.04 kg (1%) | 78 % | 51 |
| Grain | Briess - Chocolate Malt | 0.1 kg (2.5%) | 60 % | 690 |
| Sugar | Candi Sugar, Clear | 0.5 kg (12.5%) | 78.3 % | 2 |
| Grain | Jęczmień palony | 0.15 kg (3.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 8 g | 60 min | 5.1 % |
| Boil | Challenger | 10 g | 30 min | 7 % |
| Aroma (end of boil) | Challenger | 10 g | 5 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|--------|--------|-------------|
| Wyeast - London Ale III | Ale | Liquid | 500 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------|--------|---------|-------|
| Spice | Galka | 5 g | Boil | 5 min |
| Spice | Cynamon | 5 g | Boil | 5 min |