

Christmas Ale

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **51.7**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **4.4 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.2 kg (38.7%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.6 kg (19.4%) | 79 % | 16 |
| Grain | Strzegom Bursztynowy | 0.3 kg (9.7%) | 70 % | 49 |
| Grain | Pszeniczny Czekoladowy | 0.3 kg (9.7%) | 73 % | 1001 |
| Grain | Strzegom Karmel 30 | 0.1 kg (3.2%) | 75 % | 30 |
| Grain | Strzegom Karmel 600 | 0.1 kg (3.2%) | 68 % | 601 |
| Grain | Carafa Special III | 0.1 kg (3.2%) | 70 % | 1400 |
| Grain | Płatki owsiane | 0.4 kg (12.9%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 15 g | 60 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------------------|--------|---------|-------|
| Spice | Cynamon | 5 g | Boil | 5 min |
| Spice | Goździki | 2 g | Boil | 5 min |
| Spice | Gałka muskatołowa | 3 g | Boil | 5 min |
| Spice | Imbir | 3 g | Boil | 5 min |
| Spice | Skórka pomarańczy | 10 g | Boil | 5 min |
| Spice | Laktoza | 300 g | Boil | 5 min |