

Christmas Spices Ale

- Gravity **16.8 BLG**
- ABV ---
- IBU **27**
- SRM **34.1**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.8 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **65 C**, Time **40 min**
- Temp **74 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.1 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|---------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 3.5 kg (42.7%) | 80 % | 5 |
| Grain | Strzegom Pilzneński | 2 kg (24.4%) | 80 % | 4 |
| Grain | Monachijski | 1 kg (12.2%) | 80 % | 16 |
| Grain | Jęczmień palony | 0.4 kg (4.9%) | 55 % | 985 |
| Grain | Biscuit Malt | 0.2 kg (2.4%) | 79 % | 45 |
| Grain | Caramel/Crystal Malt - 30L | 0.1 kg (1.2%) | 75 % | 59 |
| Grain | Strzegom Czekoladowy ciemny | 0.3 kg (3.7%) | 68 % | 1200 |
| Liquid Extract | Miód Gryczany (Buckwheat Honey) | 0.5 kg (6.1%) | 70 % | 40 |
| Grain | Płatki owsiane | 0.2 kg (2.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | lunga | 25 g | 60 min | 11.9 % |
| Aroma (end of boil) | East Kent Goldings | 25 g | 10 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 150 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|--------------------|--------|---------|--------|
| Spice | Cynamon | 20 g | Boil | 10 min |
| Spice | Goździki | 8 g | Boil | 10 min |
| Spice | Cukier waniliowy | 30 g | Boil | 10 min |
| Spice | Gałka muszkatałowa | 6 g | Boil | 10 min |
| Spice | Imbir | 15 g | Boil | 10 min |
| Spice | Kardamon | 8 g | Boil | 10 min |
| Spice | Kolendra | 1 g | Boil | 10 min |
| Spice | Liść laurowy | 0.5 g | Boil | 10 min |
| Flavor | Skórka mandarynki | 20 g | Boil | 10 min |