

# 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 |