

# Christmas Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **23**
- SRM **32.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Fermentables

| Type  | Name                        | Amount       | Yield | EBC  |
|-------|-----------------------------|--------------|-------|------|
| Grain | Viking Pale Ale malt        | 4 kg (64%)   | 80 %  | 5    |
| Grain | Strzegom Monachijski typ II | 1 kg (16%)   | 79 %  | 22   |
| Grain | Karmelowy Jasny 30EBC       | 0.5 kg (8%)  | 75 %  | 30   |
| Grain | Weyermann Caramunich 3      | 0.25 kg (4%) | 76 %  | 150  |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (4%) | 68 %  | 1200 |
| Grain | Jęczmień palony             | 0.25 kg (4%) | 55 %  | 985  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 20 g   | 60 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 20 g   | 10 min | 4 %        |

## Yeasts

| Name                            | Type | Form | Amount | Laboratory      |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M41 Belgian Ale | Ale  | Dry  | 10 g   | Mangrove Jack's |

## Extras

| Type  | Name     | Amount | Use for | Time  |
|-------|----------|--------|---------|-------|
| Spice | Cynamon  | 40 g   | Boil    | 1 min |
| Spice | Gałka    | 20 g   | Boil    | 1 min |
| Spice | Imbir    | 10 g   | Boil    | 1 min |
| Spice | Kardamon | 30 g   | Boil    | 1 min |
| Spice | Kolendra | 30 g   | Boil    | 1 min |

## Notes

- Przyprawy dodać dopiero na whirlpool. Wszystkie mielone, suszone/z paczki, nic świeżego.  
Namaczanie w siateczce muślinowej.  
Planowany stosunek przypraw:  
Cynamon 2g/1l (1g na butelkę)  
Gałka muszkatołowa 1g/1l (0.5g na butelkę)  
Imbir 1g/1l (0,5g na butelkę)  
Kardamon 1.5g/1l (0.75g na butelkę)  
Kolendra 1.5g/1l (0.75g na butelkę)

Zacieranie:

60 minut na 68°C

15 minut na 72°C

Mash-out

*Oct 31, 2021, 7:13 PM*