

Christmas Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **15**
- SRM **7.4**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (80%) | 80 % | 5 |
| Grain | Strzegom Bursztynowy | 1 kg (20%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 15 g | 60 min | 9.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------------|--------|---------|--------|
| Spice | cynamon | 30 g | Boil | 10 min |
| Flavor | skórka mandarynki | 15 g | Boil | 10 min |
| Flavor | skórka pomarańczy | 15 g | Boil | 10 min |