

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