

Christmas Ale

- Gravity **18.9 BLG**
- ABV **8.2 %**
- IBU **80**
- SRM **33.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.75 kg (66.7%)	85 %	7
Grain	Viking Munich Malt	0.75 kg (13.3%)	78 %	18
Grain	Carafa II	0.38 kg (6.7%)	70 %	812
Grain	Weyermann - Smoked Malt	0.38 kg (6.7%)	81 %	6
Grain	Strzegom Czekoladowy 400	0.38 kg (6.7%)	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	22.5 g	60 min	10 %
Boil	Oktawia	11.25 g	60 min	7.1 %
Boil	Columbus/Tomahawk/Zeus	11.25 g	60 min	15.5 %
Boil	Marynka	11.25 g	30 min	10 %
Boil	Columbus/Tomahawk/Zeus	11.25 g	20 min	15.5 %
Boil	Puławski	11.25 g	10 min	4.3 %
Boil	Puławski	11.25 g	5 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	8.63 g	Fermentis