

Christmas Ale

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **32**
- SRM **35.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **6.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (62.5%)	80 %	5
Grain	Strzegom Monachijski typ I	0.7 kg (21.9%)	79 %	16
Grain	Strzegom Karmel 150	0.1 kg (3.1%)	75 %	150
Grain	Strzegom Karmel 300	0.1 kg (3.1%)	70 %	299
Grain	Strzegom Czekoladowy 400	0.1 kg (3.1%)	68 %	400
Grain	Strzegom Barwiący	0.2 kg (6.2%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.5 %
Boil	Lublin (Lubelski)	25 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	125 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Spice	Przyprawa do piernika	100 g	Secondary	14 day(s)