

# X-mas english porter

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **19**
- SRM **15.4**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.6 kg (90%)	85 %	7
Grain	Caraaroma	0.3 kg (7.5%)	78 %	400
Grain	Weyermann - Carafa I	0.1 kg (2.5%)	70 %	690

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	55 min	4.5 %
Boil	Fuggles	10 g	10 min	4.5 %
Aroma (end of boil)	East Kent Goldings	30 g	10 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Slant	100 ml	Omega

## Notes

- Warzone 02.11, BLG początkowe.

Brzeczka podzielona na dwa wiadra - 7 i 8l.

Czekoladowy: 180g prażonego, kruszonego kakao, dwa goździki i laska cynamonu macerowane w 207g

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Cointreau dodano do piwa 11.11.2023 (do 8l)

Butelkowane 7.5l 2.5 blg 20.11. Nagazowanie 1.8 vol, 2g glukozy/butelka.

Owocowy: 100g suszonych jabłek, 45g suszonych śliwek, 55g suszonych gruszek, 2 laski cynamonu, 5 goździków - dodane do piwa 09.11.2023 r. (do 7l)

Zabutelkowane 6l 20.11. Blg końcowe 3.0, nagazowanie 1.9 vol.

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