

Xmas porter angielski

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **26**
- SRM **29**
- Style **Brown Porter**

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 **13.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **2 min** at **78C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (86.2%)	80 %	5
Grain	pszeniczny czekoladowy ciemny weyermann	0.1 kg (3.4%)	65 %	1050
Grain	carafa special typ ii	0.1 kg (3.4%)	65 %	1150
Grain	chateu cafe	0.1 kg (3.4%)	75 %	480
Grain	żytni karmelowy weyermann	0.1 kg (3.4%)	74 %	175

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	10 g	60 min	10 %
Boil	Mandarina Bavaria	7 g	10 min	10 %
Boil	Mandarina Bavaria	13 g	0 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	150 ml	Danstar

Extras

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

Type	Name	Amount	Use for	Time
Flavor	skórki świeżej pomarańczy	60 g	Boil	10 min
Flavor	płatki dębowe vanilla	40 g	Secondary	3 day(s)
Flavor	curacao - suszona skorka gorzkiej pomarańczy	20 g	Secondary	3 day(s)
Flavor	suszona skórka słodkiej pomarańczy	20 g	Secondary	3 day(s)