

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) |