

Porter brazowo kakaowy

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **17**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **3 %**
- Size with trub loss **40 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **48.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|-------------|--------|-----|
| Grain | Viking Pale Ale malt | 5 kg (50%) | 80 % | 5 |
| Grain | Słód owsiany Fawcett | 2 kg (20%) | 61 % | 5 |
| Grain | Pszeniczny | 1 kg (10%) | 85 % | 4 |
| Grain | Brown Malt (British Chocolate) | 1 kg (10%) | 70 % | 128 |
| Grain | Castle Cafe | 0.5 kg (5%) | 75.5 % | 480 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (5%) | 79 % | 130 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Iunga | 50 g | 40 min | 11 % |
| Aroma (end of boil) | Sorachi Ace | 50 g | 1 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Danstar - Windsor Ale | Ale | Dry | 11 g | Danstar |

Extras

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

| Type | Name | Amount | Use for | Time |
|-------|-----------------|--------|---------|--------|
| Spice | ziarno kakaowca | 250 g | Boil | 10 min |