

Porter czekoladowy z owsem

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **31**
- SRM **61.4**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 1.9 kg (32.2%) | 80 % | 5 |
| Grain | Płatki owsiane | 1 kg (16.9%) | 85 % | 3 |
| Grain | Strzegom Czekoladowy 1200 | 1 kg (16.9%) | 68 % | 1201 |
| Grain | Strzegom Karmel 600 | 1 kg (16.9%) | 68 % | 601 |
| Sugar | Brown Sugar, Light | 1 kg (16.9%) | 100 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 10 % |
| Aroma (end of boil) | Pilgrim | 15 g | 15 min | 9 % |
| Aroma (end of boil) | Green Bullet | 10 g | 5 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|------|------|--------|------------|
| Safabrew t-58 | Ale | Dry | 11.5 g | --- |