

ED PORTER

- Gravity **15.9 BLG**
- ABV ---
- IBU **32**
- SRM **35.6**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **13 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **13 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|---------------|-------|------|
| Grain | Pale Malt (2 Row) UK | 2 kg (66.7%) | 78 % | 6 |
| Grain | Płatki owsiane | 0.3 kg (10%) | 85 % | 3 |
| Grain | Simpsons - Coffee Malt | 0.3 kg (10%) | 74 % | 296 |
| Grain | Simpsons - Crystal Rye | 0.2 kg (6.7%) | 73 % | 177 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (6.7%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 30 g | 60 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|--------|---------|------------|
| WLP500 - Trappist Ale Yeast | Ale | Liquid | 1000 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|---------------|-------|-----------|----------|
| Flavor | łuska kakaowa | 40 g | Mash | 30 min |
| Flavor | figi suszone | 150 g | Secondary | 4 day(s) |
| Flavor | łuska kakaowa | 40 g | Boil | 10 min |
| Flavor | laktoza | 500 g | Boil | 10 min |