

Coffee/Chocolate FES

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **27**
- SRM **43.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **26.9 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 5 kg (63.3%) | 80 % | 5 |
| Grain | Monachijski | 1 kg (12.7%) | 80 % | 16 |
| Grain | Weyermann - Carafa II | 0.75 kg (9.5%) | 70 % | 837 |
| Grain | Jęczmień palony | 0.3 kg (3.8%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.4 kg (5.1%) | 85 % | 3 |
| Sugar | Candi Sugar, Dark | 0.2 kg (2.5%) | 78.3 % | 542 |
| Grain | Abbey Malt Weyermann | 0.25 kg (3.2%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|-------|--------|-------------|
| Wyeast - American Ale II | Ale | Slant | 100 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------------|--------|-----------|----------|
| Flavor | 10l - kawa, ziarna | 50 g | Secondary | 7 day(s) |
| Flavor | 10l - kakao, ziarna | 200 g | Secondary | 7 day(s) |