

CZOKO FES 15

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **46**
- SRM **36.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (70.4%)	81 %	6
Grain	Fawcett - Dark Crystal	1 kg (14.1%)	71 %	300
Grain	Fawcett - Pale Chocolate	0.5 kg (7%)	71 %	600
Grain	Jęczmień palony	0.25 kg (3.5%)	55 %	985
Grain	Płatki owsiane	0.35 kg (4.9%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	50 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	10 g	Mangrove Jack's