

Foregin Extra Stout z dodatkiem Whisky

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **25**
- SRM **21.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Malt	4 kg (58%)	--- %	7
Grain	Monachijski typ II	1.3 kg (18.8%)	--- %	24
Grain	Karmelowy	0.4 kg (5.8%)	--- %	150
Grain	Czekoladowy	0.4 kg (5.8%)	--- %	400
Grain	Barwiący palony	0.14 kg (2%)	--- %	985
Grain	Płatki jęczmienne	0.66 kg (9.6%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	24 g	55 min	10 %
Boil	Marynka	16 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Flavor	Whisky	200 g	Boil	50 min