

FOREIGN EXTRA STOUT

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **37**
- SRM **39.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **36.1 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.3 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (51.3%)	80 %	5
Grain	Maris Otter Crisp	1 kg (10.3%)	83 %	6
Grain	Strzegom Monachijski typ II	1 kg (10.3%)	79 %	22
Grain	Viking Wheat Malt	0.5 kg (5.1%)	83 %	5
Grain	Płatki jęczmienne	0.5 kg (5.1%)	85 %	---
Grain	Płatki owsiane	0.4 kg (4.1%)	85 %	3
Grain	Carafa III	0.25 kg (2.6%)	70 %	1034
Grain	Strzegom pszenica prażona	0.25 kg (2.6%)	70 %	1000
Grain	Fawcett - Dark Crystal	0.25 kg (2.6%)	71 %	300
Grain	Jęczmień palony	0.25 kg (2.6%)	55 %	985
Grain	Fawcett - Pszeniczny Czekoladowy	0.25 kg (2.6%)	73 %	1001
Grain	Płatki pszeniczne	0.1 kg (1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek Wapnia	4 g	Mash	90 min
Water Agent	Gips piwowarski	2 g	Mash	90 min