Foregin extra stout

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **27**
- SRM **36.5**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.2 kg *(72.4%)*	82 %	4
Grain	Płatki owsiane	0.4 kg *(6.9%)*	60 %	3
Grain	Caraaroma	0.3 kg *(5.2%)*	78 %	400
Grain	Brown Malt (British Chocolate)	0.3 kg *(5.2%)*	70 %	128
Grain	Fawcett - Pszeniczny Czekoladowy	0.3 kg *(5.2%)*	60 %	1001
Grain	Carafa II	0.3 kg *(5.2%)*	60 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Wolf	15 g	60 min	11.1 %
Boil	Styrian Dragon	30 g	10 min	7.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	10 g	Mash	60 min
Fining	Whirfloc	1 g	Boil	5 min