FES

- Gravity **16.6 BLG**
- ABV **---**
- IBU **53**
- SRM **37.9**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.3 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.1 kg *(81.2%)*	80 %	4
Grain	Barley, Flaked	0.3 kg *(7.9%)*	70 %	4
Grain	Carafa II	0.125 kg *(3.3%)*	70 %	812
Grain	Jęczmień palony	0.125 kg *(3.3%)*	55 %	985
Grain	Strzegom Karmel 300	0.166 kg *(4.4%)*	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	20 g	60 min	14.3 %
Aroma (end of boil)	Sybilla	20 g	15 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	60 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	2 g	Mash	60 min

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