

## Foreign Extra Stout

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **31**
- SRM **28.6**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18.7 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.3 kg (68.8%)	80 %	5
Grain	Strzegom Monachijski typ I	1.4 kg (22.4%)	79 %	16
Grain	Jęczmień palony	0.3 kg (4.8%)	55 %	985
Grain	Czekoladowy	0.25 kg (4%)	60 %	788

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	300 ml	Fermentum Mobile