

## Foreign Extra Stout

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- Gravity **17.1 BLG**
- ABV ---
- IBU **56**
- SRM **44.4**
- 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 **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **19.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.9%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (3.9%)	55 %	985
Grain	Viking Munich Malt	0.5 kg (7.8%)	78 %	18
Grain	Viking Pale Ale malt	5 kg (78.1%)	80 %	5
Grain	Płatki jęczmienne	0.4 kg (6.3%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	50 g	30 min	6 %
Boil	Iunga	20 g	50 min	11 %
Boil	Sybilla	50 g	10 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	---