

## # Foreign Extra Stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **46**
- SRM **25.3**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **27.8 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **20.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pale Ale	5.71 kg (82%)	80 %	5
Grain	Caraaroma	0.4 kg (5.7%)	78 %	400
Grain	Jęczmień palony	0.25 kg (3.6%)	55 %	985
Grain	Carafa 1	0.1 kg (1.4%)	70 %	900
Grain	płatki jęczmienne	0.5 kg (7.2%)	70 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	58 g	50 min	8.8 %
Boil	Lublin (Lubelski)	45 g	10 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM21 Odkrycie sezonu	Ale	Slant	200 ml	Fermentum Mobile