

FOREIGN EXTRA STOUT

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **46**
- SRM **36.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **31.9 liter(s)**

Steps

- Temp **69 C**, Time **75 min**
- Temp **69 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **69C**
- Keep mash **75 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Dark Munich Malt	2 kg (28.2%)	82 %	20
Grain	Weyermann - Vienna Malt	1.5 kg (21.1%)	81 %	8
Grain	Weyermann - Pilsner Malt	1.5 kg (21.1%)	81 %	4
Grain	Strzegom Czekoladowy jasny	0.5 kg (7%)	68 %	400
Grain	Płatki jęczmienne	1 kg (14.1%)	60 %	4
Grain	Weyermann - Carafa III	0.5 kg (7%)	70 %	1024
Grain	Weyermann - Carafa I	0.1 kg (1.4%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	35 g	60 min	14.3 %
Boil	East Kent Goldings	20 g	10 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis