

# FOREIGN EX STOUT

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- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **32**
- SRM **32.8**
- 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 **26.6 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **35 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bruntal - Pilzniejszy (klepiskowy) 2	1.5 kg (24.6%)	81 %	4
Grain	Viking Malt - Pilzniejszy	3.3 kg (54.1%)	80 %	5
Grain	Viking Malt - Karmelowy Czerwony	0.3 kg (4.9%)	75 %	59
Grain	Weyermann - Carafa III	0.3 kg (4.9%)	65 %	1500
Grain	Viking Malt - Prażone ziarno jęczmienia	0.2 kg (3.3%)	70 %	1000
Adjunct	Płatki jęczmienne	0.5 kg (8.2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	50 min	6.7 %
Boil	Lublin (Lubelski)	40 g	10 min	6 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Slant	300 ml	xxx