

# LEM| Foreign Extra Stout

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **40**
- SRM **23.5**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **8 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **75C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (71.4%)	82 %	4
Grain	Caraaroma	0.3 kg (4.3%)	78 %	400
Grain	Jęczmień palony	0.2 kg (2.9%)	55 %	985
Grain	Weyermann - Carafa I	0.1 kg (1.4%)	70 %	690
Grain	Płatki jęczmienne	0.4 kg (5.7%)	85 %	3
Liquid Extract	Ekstrakt słodowy jasny	1 kg (14.3%)	80 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	55 min	13 %
W oryginalnym przepisie: 35g Aurora 55 min				
Boil	Styrian Golding	50 g	10 min	3.6 %
W oryginalnym przepisie: 40 g				

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's -M15 Empire Ale	Ale	Liquid	600 ml	Mangrove Jack's
Rozmnożone drożdże 1L starterze 8 BLG.				

## Notes

- Płatki owsiane skleikowane w 2L wody.  
Wymieszane z 12L wody,  
Temperatura podniesiona do 66C  
Dodane pozostałe składniki.  
LME (Płynny ekstrakt) z powodu zbyt małego garnka do zacierania.  
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