

# Graphene - Foreign Extra Stout v.1.2

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- Gravity **17.1 BLG**
- ABV ---
- IBU **66**
- SRM **41.6**
- 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.5 kg (84.6%)	79 %	6
Grain	Jęczmień palony	0.5 kg (7.7%)	55 %	985
Grain	Strzegom Pszeniczny	0.5 kg (7.7%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	40 g	50 min	14.2 %
Boil	Fuggles	30 g	30 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile