

# FOREIGN EXTRA STOUT Z PIWOWARA

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **59**
- SRM **38.4**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

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

## Mash step by step

- Heat up **14 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **2.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (75%)	80 %	5
Grain	płatki jęczmienne	0.3 kg (7.5%)	60 %	4
Grain	Strzegom Czekoladowy jasny	0.3 kg (7.5%)	68 %	400
Grain	Jęczmień palony	0.2 kg (5%)	55 %	985
Grain	Caraaroma	0.2 kg (5%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	27 g	60 min	11 %
Boil	East Kent Goldings	22 g	10 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis