

# Irish stout piwowar

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **33**
- SRM **31.1**
- Style **American 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 **5 %/h**
- Boil size **24.1 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 **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.8 kg (70%)	80 %	5
Grain	Płatki jęczmienne	0.6 kg (15%)	75 %	---
Grain	Jęczmień palony	0.3 kg (7.5%)	55 %	985
Grain	Fawcett - Pszeniczny Czekoladowy	0.3 kg (7.5%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	20 g	60 min	11 %
Boil	Fuggles	20 g	20 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP007 - Dry English Ale Yeast	Ale	Slant	140 ml	White Labs