

# Rye Stout

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **57**
- SRM **45.5**
- 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 **13 %/h**
- Boil size **26.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **24.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **26.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.5 kg (42.7%)	81 %	6
Grain	Żytni	2 kg (24.4%)	85 %	8
Grain	Brown Malt (British Chocolate)	0.6 kg (7.3%)	70 %	128
Grain	Rye, Flaked	0.5 kg (6.1%)	78.3 %	4
Grain	Biscuit Malt	0.5 kg (6.1%)	79 %	45
Grain	Simpsons - Chocolate Malt	0.5 kg (6.1%)	73 %	1067
Grain	Simpsons - Roasted Barley	0.3 kg (3.7%)	70 %	1084
Grain	Strzegom Karmel 300	0.3 kg (3.7%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	41.2 g	60 min	16.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP007 - Dry English Ale Yeast	Ale	Slant	400 ml	White Labs