

# Rye Stout

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **52**
- SRM **37.7**
- 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 **3.4 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.8 liter(s)**

## Steps

- Temp **40 C**, Time **20 min**
- Temp **62 C**, Time **120 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **42.9C**
- Add grains
- Keep mash **20 min** at **40C**
- Keep mash **120 min** at **62C**
- Keep mash **5 min** at **76C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.3 kg (18.6%)	81 %	4
Grain	Strzegom Monachijski typ I	3 kg (42.9%)	79 %	16
Grain	Pszeniczny	0.5 kg (7.1%)	85 %	4
Grain	Żytni	1 kg (14.3%)	85 %	8
Grain	Caraaroma	0.5 kg (7.1%)	78 %	400
Grain	Carafa	0.35 kg (5%)	70 %	664
Grain	Chocolate Malt (UK)	0.35 kg (5%)	73 %	887

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	12.9 %
Boil	Green Bullet	20 g	60 min	12.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
05	Ale	Slant	300 ml	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Tonka Beans	15 g	Secondary	7 day(s)
Spice	Cynamon	5 g	Secondary	7 day(s)
Flavor	Płatki dębowe whisky	25 g	Secondary	7 day(s)