

# Czarna Wołga

- Gravity **24 BLG**
- ABV **11 %**
- IBU **61**
- SRM **40.4**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **120 min**
- Evaporation rate **14 %/h**
- Boil size **20.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **19.9 liter(s)**

## Steps

- Temp **65 C**, Time **110 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **110 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód Pale Ale	4.5 kg (66.2%)	79 %	6
Grain	słód Abbey	0.3 kg (4.4%)	--- %	45
Grain	słód Special B	0.3 kg (4.4%)	--- %	290
Grain	słód czekoladowy żytni	0.3 kg (4.4%)	--- %	650
Grain	słód czekoladowy pszeniczny	0.3 kg (4.4%)	--- %	1000
Adjunct	płatki owsiane	0.9 kg (13.2%)	85 %	3
Sugar	cukier	0.2 kg (2.9%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Golding	85 g	70 min	4.6 %
Boil	Challenger	30 g	70 min	5.8 %
Boil	Spalt Select	15 g	20 min	3.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safeale US-05	Ale	Liquid	600 ml	Fermentis