

# 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  |