

# Kawowa wołga

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **32**
- SRM **40.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **65 min**
- Evaporation rate **13 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **20 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale	4 kg (69.6%)	85 %	6
Grain	Caramunich® typ I	0.5 kg (8.7%)	85 %	90
Grain	Viking Jęczmień prażony	0.45 kg (7.8%)	85 %	900
Grain	Strzegom Czekoladowy 400	0.35 kg (6.1%)	85 %	400
Grain	Abbey Malt Weyermann	0.3 kg (5.2%)	85 %	45
Grain	Strzegom Czekoladowy 1200	0.15 kg (2.6%)	85 %	1202

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	35 g	60 min	5.8 %
Boil	Epic	20 g	25 min	3.7 %
Boil	Fuggle	20 g	10 min	6.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	22 g	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Flavor	kawa	75 g	Secondary	3 day(s)