

## Stout warka 24

- Gravity **19.6 BLG**
- ABV ---
- IBU **36**
- SRM **69.9**
- 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 **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **28 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4 kg (49.9%)	80 %	7
Grain	Pszeniczny	1 kg (12.5%)	85 %	4
Grain	Caramel/Crystal Malt - 10L	0.66 kg (8.2%)	75 %	20
Grain	Caraaroma	0.34 kg (4.2%)	78 %	400
Grain	Strzegom Karmel 150	0.5 kg (6.2%)	75 %	150
Grain	Brown Malt (British Chocolate)	0.21 kg (2.6%)	70 %	128
Grain	Briess - Chocolate Malt	0.4 kg (5%)	60 %	690
Grain	Carafa III	0.2 kg (2.5%)	70 %	1034
Grain	Carafa II	0.2 kg (2.5%)	70 %	812
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (2.5%)	73 %	1001
Grain	Płatki owsiane	0.3 kg (3.7%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	13.5 %

Boil	Sybilla	25 g	20 min	3.5 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale