

## Warka Strong - ver. 3

- Gravity **15.4 BLG**
- ABV ---
- IBU **34**
- SRM **10.7**
- Style **Specialty Beer**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **15 %/h**
- Boil size **24 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **13.7 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.7 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **24 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1 kg (25.3%)	81 %	4
Grain	Strzegom Karmel 150	0.2 kg (5.1%)	75 %	150
Sugar	Cane (Beet) Sugar	0.9 kg (22.8%)	100 %	0
Grain	Barley, Flaked	0.2 kg (5.1%)	70 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (12.7%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (25.3%)	79 %	22
Grain	Acid Malt	0.1 kg (2.5%)	58.7 %	6
Grain	Strzegom Karmel 600	0.05 kg (1.3%)	68 %	601

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	100 min	13.5 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	35 min	4 %
Boil	Challenger	10 g	70 min	7 %

Boil	Saaz (Czech Republic)	3 g	70 min	4.5 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	100 min