

# Warka Strong - ver. 3

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **20**
- SRM **9.7**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **100 min**
- Evaporation rate **15 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **28.3 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **22 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	5 kg (70.5%)	81 %	4
Grain	Strzegom Karmel 150	0.2 kg (2.8%)	75 %	150
Sugar	Cane (Beet) Sugar	0.8 kg (11.3%)	100 %	0
Grain	Barley, Flaked	0 kg	70 %	4
Grain	Strzegom Monachijski typ I	1 kg (14.1%)	79 %	16
Grain	Strzegom Monachijski typ II	0 kg	79 %	22
Grain	Acid Malt	0 kg	58.7 %	6
Grain	Strzegom Karmel 600	0.09 kg (1.3%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	100 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	35 min	4 %
Boil	Citra	8 g	70 min	7 %
Boil	Iu	4 g	70 min	4.5 %

## 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