

Warka Strong

- Gravity **15.9 BLG**
- ABV ---
- IBU **31**
- SRM **14.3**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **45 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1 kg (27%)	81 %	4
Grain	Strzegom Karmel 30	0.2 kg (5.4%)	75 %	150
Sugar	Cane (Beet) Sugar	0.4 kg (10.8%)	100 %	0
Adjunct	Honey	0.2 kg (5.4%)	75 %	2
Sugar	Brown Sugar, Light	0.1 kg (2.7%)	100 %	99
Grain	Barley, Flaked	0.2 kg (5.4%)	70 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (13.5%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (27%)	79 %	22
Grain	Acid Malt	0.1 kg (2.7%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	15 min	4 %
Boil	Iunga	10 g	30 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Slant	800 ml	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	60 min
Water Agent	chlorek wapnia	2 g	Mash	---