

Marcowe-moje

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **24**
- SRM **4.4**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **30 min**
- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **60 min** at **66C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4 kg (66.7%)	79 %	10
Grain	Słód monachijski	2 kg (33.3%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	30 min	12 %
Boil	Cascade PL	15 g	30 min	5.2 %
Boil	Centennial	15 g	15 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis