

# Oktoberfest-Marcowe Karminowe

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **25**
- SRM **5.8**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **2 min** at **78C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (37.8%)	79 %	10
Grain	Strzegom Pilzneński	2 kg (37.8%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (18.9%)	79 %	16
Grain	Strzegom Karmel 30	0.29 kg (5.5%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	7 %
Boil	Perle	18 g	30 min	7 %
Boil	Saaz (Czech Republic)	18 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast XL 2308 Munich Lager	Lager	Liquid	2000 ml	starter

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5.75 g	Boil	15 min

## Notes

- odważoną porcję mchu wymieszać w wodzie (na każde 10 g mchu 50 ml wody). Pozostawić na 10-15 minut i dodać do brzeczki na ostatnie 10-15 minut gotowania  
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