

# Marcowe obliczenia

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **29**
- SRM **7.5**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **1 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **15 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **13.9 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **15 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1.6 kg (51.6%)	79 %	10
Grain	Strzegom Monachijski typ I	1.5 kg (48.4%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	13 g	60 min	10 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %
Aroma (end of boil)	Citra	15 g	1 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	11.5 g	---

## Notes

- Burzliwa 5-7 dni temp. 15-16 st C  
Cicha 7 dni temp. 10-12 st. C  
*Jan 15, 2021, 2:51 PM*