

# Lutowe Marcowe

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- Gravity **12.6 BLG**
- ABV ---
- IBU **21**
- SRM **12.8**
- Style **Oktoberfest/Märzen**

## 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 **34.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **53 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **34.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (42.9%)	80 %	4
Grain	Strzegom Monachijski typ II	2 kg (28.6%)	79 %	22
Grain	Strzegom Wiedeński	1.5 kg (21.4%)	79 %	10
Grain	Weyermann Specjal W	0.5 kg (7.1%)	68 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	33 g	60 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	300 ml	Fermentum Mobile