

# Marcowe

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **19**
- SRM **4.6**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name             | Amount       | Yield  | EBC  |
|-------|------------------|--------------|--------|------|
| Grain | Słód pilzneński  | 2.5 kg (50%) | 80 %   | 4    |
| Grain | Słód wiedeński   | 1.6 kg (32%) | 79.8 % | 8    |
| Grain | Słód monachijski | 0.3 kg (6%)  | 78.8 % | 17.5 |
| Grain | Słód pszeniczny  | 0.6 kg (12%) | 82.8 % | 4    |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Tradition | 20 g   | 60 min | 5.5 %      |
| Boil    | Tradition | 15 g   | 30 min | 5.5 %      |

## Yeasts

| Name         | Type  | Form | Amount | Laboratory |
|--------------|-------|------|--------|------------|
| German lager | Lager | Dry  | 11 g   | ---        |