

# Marcowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **11.1**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **4 %**
- Size with trub loss **43.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **49 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33.6 liter(s)**
- Total mash volume **44.8 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **33.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **26.6 liter(s)** of **76C** water or to achieve **49 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield  | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Strzegom Wiedeński          | 7 kg (62.5%)   | 79 %   | 10  |
| Grain | Strzegom Monachijski typ II | 1.5 kg (13.4%) | 79 %   | 22  |
| Grain | Strzegom Karmel 30          | 0.5 kg (4.5%)  | 75 %   | 30  |
| Grain | Carahell                    | 1 kg (8.9%)    | 77 %   | 26  |
| Grain | Viking melanoidynowy        | 0.5 kg (4.5%)  | 75 %   | 60  |
| Grain | Acid Malt                   | 0.5 kg (4.5%)  | 58.7 % | 6   |
| Grain | Strzegom Czekoladowy jasny  | 0.2 kg (1.8%)  | 68 %   | 400 |

## Hops

| Use for             | Name      | Amount | Time   | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil                | Marynka   | 45 g   | 60 min | 9.1 %      |
| Aroma (end of boil) | Tradition | 45 g   | 20 min | 5 %        |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|               |       |     |      |                                       |
|---------------|-------|-----|------|---------------------------------------|
| Saflager S-23 | Lager | Dry | 23 g | Fermentis Division<br>of S.I.Lesaffre |
|---------------|-------|-----|------|---------------------------------------|

## Notes

- IBU zdecydowanie dużo niższe, niż wynika z obliczeń, nie równoważy słodowości, przy kolejnym warzeniu dodać 70g Marynki  
*May 18, 2021, 1:36 PM*