

# Marcowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **24**
- SRM **6.9**
- 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 **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

## Fermentables

| Type    | Name                       | Amount         | Yield | EBC |
|---------|----------------------------|----------------|-------|-----|
| Grain   | Strzegom Pilzneński        | 4 kg (66%)     | 80 %  | 4   |
| Grain   | Strzegom Monachijski typ I | 2 kg (33%)     | 79 %  | 16  |
| Grain   | Carared                    | 0.04 kg (0.7%) | 75 %  | 39  |
| Adjunct | Barwiący                   | 0.02 kg (0.3%) | 55 %  | 985 |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 26 g   | 60 min | 10 %       |
| Aroma (end of boil) | Marynka           | 4 g    | 5 min  | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 4 g    | 5 min  | 4 %        |

## Yeasts

| Name          | Type  | Form | Amount | Laboratory                         |
|---------------|-------|------|--------|------------------------------------|
| Saflager S-23 | Lager | Dry  | 11 g   | Fermentis Division of S.I.Lesaffre |

## Extras

| Type   | Name           | Amount | Use for | Time  |
|--------|----------------|--------|---------|-------|
| Fining | mech irlandzki | 7.32 g | Boil    | 5 min |

## Notes

- Barwiący dodać do wysładzania  
*Mar 2, 2018, 11:29 AM*