

## #07 Marcowe

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **21**
- SRM **5.9**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

### Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **75 C**, Time **5 min**

### Mash step by step

- Heat up **17.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

### Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Malteurop - pilsneński             | 1 kg (17.5%)   | 80 %  | 4   |
| Grain | Malteurop - pilsneński lager       | 1 kg (17.5%)   | 80 %  | 6   |
| Grain | Weyermann - Carahell               | 0.2 kg (3.5%)  | 75 %  | 24  |
| Grain | Słodownia Strzegom - wiedeński     | 2 kg (35.1%)   | 79 %  | 7   |
| Grain | Słodownia Strzegom - monachijski I | 1.5 kg (26.3%) | 79 %  | 12  |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Marynka    | 20 g   | 60 min | 9.5 %      |
| Boil    | Willamette | 15 g   | 0 min  | 5 %        |
| Boil    | Kazbek     | 12 g   | 5 min  | 6 %        |

### Yeasts

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

|                 |       |         |       |     |
|-----------------|-------|---------|-------|-----|
| Saflager W34/70 | Lager | Culture | 275 g | --- |
|-----------------|-------|---------|-------|-----|

### Extras

| Type   | Name            | Amount | Use for | Time   |
|--------|-----------------|--------|---------|--------|
| Fining | Miech irlandzki | 5 g    | Boil    | 10 min |