

Marcowe II

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **7.2**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Pilzneński | 2 kg (62.5%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.8 kg (25%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 0.3 kg (9.4%) | 79 % | 10 |
| Grain | Strzegom Karmel 150 | 0.1 kg (3.1%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 16 g | 60 min | 7.8 % |
| Boil | Lublin (Lubelski) | 15 g | 20 min | 4 % |

Yeasts

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