

MARCOWE

- Gravity **15 BLG**
- ABV ---
- IBU **23**
- SRM **11.3**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **46.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.8 liter(s)**
- Total mash volume **41 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **30.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **25.8 liter(s)** of **76C** water or to achieve **46.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 5 kg (47.6%) | 80.5 % | 2 |
| Grain | Strzegom Wiedeński | 2.8 kg (26.7%) | 79 % | 10 |
| Grain | Monachijski | 1.9 kg (18.1%) | 80 % | 16 |
| Grain | cristal | 0.25 kg (2.4%) | 75 % | 160 |
| Adjunct | płatki żynie | 0.25 kg (2.4%) | 80 % | 5 |
| Grain | Caraaroma | 0.3 kg (2.9%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|-------------------|--------|--------|------------|
| First Wort | Marynka | 20 g | 90 min | 10 % |
| Boil | Marynka | 25 g | 15 min | 10 % |
| Boil | Lublin (Lubelski) | 25 g | 10 min | 4 % |

Yeasts

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

| | | | | |
|-------------------------|-------|--------|--------|-------------|
| Wyeast - Bavarian Lager | Lager | Liquid | 100 ml | Wyeast Labs |
|-------------------------|-------|--------|--------|-------------|

Extras

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