

Marcowe

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **31**
- SRM **9.9**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **53.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **35.5 liter(s)**
- Total mash volume **47.4 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **35.5 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **30.3 liter(s)** of **76C** water or to achieve **53.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|-----------------|--------|-----|
| Grain | Weyermann - Monachijski typ I | 6 kg (50.6%) | 80 % | 16 |
| Grain | Weyermann - Pilsner Malt | 3.85 kg (32.5%) | 81 % | 5 |
| Grain | Weyermann - wiedeński | 0.6 kg (5.1%) | 79 % | 8 |
| Grain | Weyermann - Carahell | 0.6 kg (5.1%) | 77 % | 26 |
| Grain | Weyermann Caramunich 3 | 0.6 kg (5.1%) | 76 % | 150 |
| Grain | Acid Malt | 0.2 kg (1.7%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Magnum | 35 g | 60 min | 13.5 % |
| Boil | Saaz (Czech Republic) | 60 g | 20 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--|-------------|-------------|---------------|-------------------|
| Drożdże Wyeast 2124 Bohemian Lager | Lager | Liquid | 40 ml | Wyeast |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|---------------|----------------|-------------|
| Fining | Mech irlandzki | 14 g | Boil | 30 min |