

LEM | Marcowe

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **10.1**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **3 %**
- Size with trub loss **51.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **57.6 liter(s)**

Mash information

- Mash efficiency **87 %**
- Liquor-to-grist ratio **3.33 liter(s) / kg**
- Mash size **35 liter(s)**
- Total mash volume **45.5 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **35 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **33.1 liter(s)** of **76C** water or to achieve **57.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Wiedeński | 5 kg (47.6%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 5 kg (47.6%) | 79 % | 16 |
| Grain | Strzegom Karmel 300 | 0.5 kg (4.8%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Perle | 70 g | 60 min | 7 % |
| Aroma (end of boil) | Hersbrucker | 50 g | 15 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|-------|------|--------|------------|
| Mauribrew Lager | Lager | Dry | 22 g | --- |