

Marcowe

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **6**
- SRM **8.3**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **52 C**, Time **30 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **3 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński | 2.8 kg (50%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 2.6 kg (46.4%) | 79 % | 16 |
| Grain | Caramunich® typ I | 0.2 kg (3.6%) | 73 % | 80 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Hersbrucker | 15 g | 75 min | 3 % |
| Aroma (end of boil) | Hersbrucker | 55 g | 1 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Saflager S-23 | Lager | Dry | 11.5 g | Fermentis |