

Marcowe g

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **32**
- SRM **6.7**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **25 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **23.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **25 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 4 kg (60%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1.67 kg (25%) | 79 % | 16 |
| Grain | Strzegom Karmel 30 | 1 kg (15%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 25 g | 60 min | 13.5 % |
| Boil | Lublin (Lubelski) | 25 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|----------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 58.33 ml | Fermentum Mobile |