

Marcowe 2

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **6.4**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 3.7 kg (61.7%) | 80 % | 4 |
| Grain | Monachijski | 1 kg (16.7%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 1 kg (16.7%) | 79 % | 10 |
| Grain | BESTMALZ - Best Melanoidin | 0.3 kg (5%) | 75 % | 71 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 8 % |
| Boil | Saaz (Czech Republic) | 30 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|-------|-------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Slant | 200 ml | Fermentum Mobile |