

Marcowe

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **29**
- SRM **6.8**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|-----------------|-------|-----|
| Grain | Pilzneński | 3.57 kg (64.6%) | 81 % | 4 |
| Grain | Monachijski | 1.9 kg (34.4%) | 80 % | 16 |
| Grain | Carared | 0.04 kg (0.8%) | 75 % | 39 |
| Grain | Barwiący | 0.02 kg (0.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|---------|--------|------------|
| Boil | Marynka | 26.55 g | 70 min | 10 % |
| Aroma (end of boil) | Marynka | 3.79 g | 10 min | 10 % |
| Aroma (end of boil) | Lublin (Lubelski) | 3.79 g | 10 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------|--------|-----------|------------|
| Munich Lager | Lager | Liquid | 113.79 ml | wyest |