

## marcowe

---

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4.8**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **31 liter(s)**
- Trub loss **2 %**
- Size with trub loss **31.9 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **34.7 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Weyermann - Melanoiden Malt	0.5 kg (8.3%)	81 %	53
Grain	Pszeniczny	0.3 kg (5%)	85 %	4
Grain	Weyermann - Carapils	0.2 kg (3.3%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga pl	25 g	70 min	11 %
Boil	lunga pl	5 g	5 min	11 %
Boil	Premiant	5 g	5 min	6.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	100 ml	Fermentum Mobile