

## Märzen 3

---

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **24**
- SRM **6.8**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **15 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **6 %/h**
- Boil size **28.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount       | Yield  | EBC |
|-------|---------------------|--------------|--------|-----|
| Grain | Wiener Malz Best    | 3 kg (50%)   | 80 %   | 8   |
| Grain | Münchener Malz Best | 1.5 kg (25%) | 78 %   | 20  |
| Grain | Pilsner             | 1.2 kg (20%) | 80.5 % | 4   |
| Grain | Carahell Best       | 0.3 kg (5%)  | 75 %   | 30  |

### Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Perle    | 15 g   | 60 min | 9.7 %      |
| Boil                | Marynka  | 20 g   | 15 min | 9.1 %      |
| Aroma (end of boil) | Lubelski | 20 g   | 5 min  | 5.7 %      |

### Yeasts

| Name                         | Type  | Form   | Amount | Laboratory  |
|------------------------------|-------|--------|--------|-------------|
| Wyeast - 2206 Bavarian Lager | Lager | Liquid | 300 ml | Wyeast Labs |