

Marzen

- Gravity **14.3 BLG**
- ABV ---
- IBU **29**
- SRM **7.9**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **66 C**, Time **65 min**
- Temp **75 C**, Time **0 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **65 min** at **66C**
- Keep mash **0 min** at **75C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński | 2 kg (38.5%) | 81 % | 4 |
| Grain | Monachijski | 1.6 kg (30.8%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 1.2 kg (23.1%) | 79 % | 10 |
| Grain | Weyermann - Carapils | 0.4 kg (7.7%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Marynka | 23 g | 60 min | 10 % |
| Boil | Tettnang | 10 g | 20 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M84 Bohemian Lager | Lager | Dry | 11 g | Mangrove Jack's |