

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **24**
- SRM **9.8**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **65 C**, Time **90 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Vienna	3 kg (49.4%)	80.5 %	9
Grain	BESTMALZ - Best Pilsen	2 kg (32.9%)	80.5 %	4
Grain	BESTMALZ - Best Munich	1 kg (16.5%)	80.5 %	16
Grain	Weyermann - Dehusked Carafa II	0.07 kg (1.2%)	70 %	837

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	21 g	45 min	10 %
Boil	Lubelski	20 g	15 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Slant	200 ml	safale