

Testament

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **6**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **5 %**
- Size with trub loss **30.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **41.1 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **33.3 liter(s)**
- Total mash volume **40.7 liter(s)**

Steps

- Temp **65 C**, Time **120 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **33.3 liter(s)** of strike water to **70C**
- Add grains
- Keep mash **120 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **76C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **41.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Wiedeński	6.2 kg (83.8%)	79 %	8
Grain	Strzegom Monachijski typ I	1 kg (13.5%)	79 %	16
Grain	Melanoiden Malt	0.2 kg (2.7%)	80 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Sybilla	14 g	100 min	7 %
First Wort	Lublin (Lubelski)	40 g	100 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP830 - German Lager Yeast	Lager	Slant	275 ml	White Labs