

Lager

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **4**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Strzegom Wiedeński	1 kg (16.7%)	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	30 min	17.4 %
Boil	Citra	40 g	5 min	17.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34 70	Lager	Dry	21 g	---