

# German Strong Lager 03-12-2020 r

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **23**
- SRM **2.8**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	7 kg (100%)	81 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	10 g	60 min	11 %
Boil	Saaz (Czech Republic)	20 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	15 min	4.5 %
Whirlpool	Saaz (Czech Republic)	80 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Bavarian Lager	Lager	Slant	180 ml	Wyeast Labs