

ZeGerman

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **38**
- SRM **3.4**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **30.3 liter(s)**
- Total mash volume **35.8 liter(s)**

Steps

- Temp **62 C**, Time **120 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **30.3 liter(s)** of strike water to **65.8C**
- Add grains
- Keep mash **120 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (81.8%)	81 %	4
Grain	Fawcett - Flaked Maize	0.5 kg (9.1%)	90 %	4
Grain	Rice, Flaked	0.5 kg (9.1%)	91 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	90 min	12 %
Boil	Liberty	20 g	25 min	4.5 %
Boil	Sterling	20 g	25 min	4.5 %
Boil	Liberty	15 g	15 min	4.5 %
Boil	Sterling	15 g	15 min	4.5 %
Boil	Liberty	15 g	5 min	4.5 %
Boil	Sterling	15 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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WLP830 - German Lager Yeast	Lager	Slant	150 ml	White Labs
Saflager W 34/70	Lager	Slant	150 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1 g	Boil	15 min