

Hoppy Lager

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **34**
- SRM **12.3**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (37%)	85 %	7
Grain	Abbey Castle	3 kg (55.6%)	80 %	45
Grain	Viking Pilsner malt	0.4 kg (7.4%)	82 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	50 g	60 min	3.8 %
Aroma (end of boil)	ZULA	50 g	10 min	7.3 %
Dry Hop	ZULA	50 g	7 day(s)	7.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
brewferm lager	Lager	Dry	12 g	Brewferm