

lager H8

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **5.5**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **35.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **51 C**, Time **10 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **56.2C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **45 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **22.6 liter(s)** of **76C** water or to achieve **35.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.25 kg (65.2%)	81 %	4
Grain	Karamel Pils Steinbach	0.21 kg (3.2%)	79 %	6
Grain	Karmelowy Jasny 30EBC	0.31 kg (4.8%)	75 %	30
Grain	monachijski jasny viking	1.75 kg (26.8%)	--- %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	saaz late	70 g	60 min	3.76 %
Boil	Lublin (Lubelski)	30 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	mech irlandzki	10 g	Boil	10 min