

Lichtenheiner

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **7**
- SRM **2.8**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **13.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **4.9 liter(s)**
- Total mash volume **6.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **4.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **13.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszoniczny	0.8 kg (49.1%)	85 %	4
Grain	Słód Wędzony Steinbach	0.8 kg (49.1%)	80 %	5
Grain	Zakwaszający	0.03 kg (1.8%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	6 g	60 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	1.5 g	Mash	---
Water Agent	chlerek wapnia	1.65 g	Mash	---