

Lichtenheiner

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **5**
- SRM **2.9**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony bestmaltz	1.3 kg (56.5%)	80 %	5
Grain	Grodziski pszeniczny wędzony dębem	1 kg (43.5%)	80 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Spalt	5 g	60 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.1 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	zakwaszanie PG Serowar	3 g	Mash	---