

## #064 Lichtenhainer

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **8**
- SRM **3.2**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **19 %/h**
- Boil size **32.6 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **21.5 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **17.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.5 kg (58.1%)	82 %	4
Grain	Weyermann - Grodziski	1.5 kg (34.9%)	80 %	5
Grain	Viking Malt Wędzony bukiem	0.3 kg (7%)	82 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	20 g	60 min	3.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc T	1.25 g	Boil	10 min
Other	pożywka dla drożdży Wyeast	3 g	Boil	10 min