

# Lichtenhainer v2

---

- Gravity **8 BLG**
- ABV **3.1 %**
- IBU **17**
- SRM **2.6**
- Style **Grodziskie/Graetzer**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **1 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **25.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **6.5 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.5 liter(s)** of strike water to **67.4C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.6 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount         | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 1 kg (31.7%)   | 80 %  | 3   |
| Grain | Pszeniczny                         | 1 kg (31.7%)   | 85 %  | 4   |
| Grain | Viking Pale Ale malt               | 1 kg (31.7%)   | 80 %  | 5   |
| Grain | Żytni                              | 0.15 kg (4.8%) | 85 %  | 8   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Eureka! | 5 g    | 30 min | 18 %       |
| Aroma (end of boil) | Eureka! | 20 g   | 5 min  | 18 %       |
| Whirlpool           | Eureka! | 25 g   | 0 min  | 18 %       |

## Yeasts

| Name                | Type | Form | Amount | Laboratory |
|---------------------|------|------|--------|------------|
| FM51 Grodzie Dębowe | Ale  | Dry  | 11 g   | Fermentis  |