

## Las w butelce (Forest Ale)

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **19**
- SRM **4.4**
- Style **Specialty Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **21.8 liter(s)**

### Steps

- Temp **50 C**, Time **15 min**
- Temp **68 C**, Time **50 min**
- Temp **79 C**, Time **1 min**

### Mash step by step

- Heat up **17.4 liter(s)** of strike water to **53.8C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **50 min** at **68C**
- Keep mash **1 min** at **79C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (69%)	85 %	7
Grain	Weyermann pszeniczny jasny	0.8 kg (18.4%)	80 %	6
Grain	Słód owsiany Fawcett	0.3 kg (6.9%)	61 %	5
Grain	Płatki pszeniczne	0.25 kg (5.7%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	13.2 %
Boil	Izabella	10 g	25 min	5.1 %
Boil	Simcoe	40 g	0 min	13.2 %
Boil	Izabella	70 g	0 min	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Herb	Pędy sosny	200 g	Boil	5 min
Herb	Pędy świerku	150 g	Boil	5 min
Herb	Klitoria ternateńska	25 g	Boil	5 min
Herb	Szafran (krokosz barwierski)	25 g	Boil	5 min

## Notes

- Szafran i klitoria do zabarwienia piwa na zielono.  
*Jun 5, 2021, 1:02 PM*