

Leśniak

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **43**
- SRM **28.5**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

Steps

- Temp **62 C**, Time **35 min**
- Temp **70 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **35 min** at **62C**
- Keep mash **10 min** at **70C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (86%)	81 %	4
Grain	Weyermann - Chocolate Rye	0.4 kg (8.6%)	20 %	650
Grain	Fawcett - Pale Chocolate	0.25 kg (5.4%)	71 %	500

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Aroma (end of boil)	lunga	25 g	5 min	11 %
Whirlpool	XJA/436 RPA	25 g	0 min	15 %
Dry Hop	XJA/436 RPA	25 g	3 day(s)	15 %
Whirlpool	African Queen	25 g	0 min	13.5 %
Dry Hop	African Queen	25 g	3 day(s)	13.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Other	jagody	1500 g	Secondary	7 day(s)
Flavor	jodła koreańska	100 g	Boil	5 min