

Czarna LIPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **67**
- SRM **28.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **74C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	3.5 kg (70%)	80.5 %	6
Grain	Carafa II	0.5 kg (10%)	70 %	812
Grain	Pszeniczny	1 kg (20%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	8.8 %
Boil	citra	15 g	40 min	13.5 %
Whirlpool	Mosaic	25 g	0 min	10 %
Hop Stand 20 min 75 stopni				
Whirlpool	Citra	25 g	0 min	13.5 %
Hop Stand 20 min 75 stopni				

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile