

# Czarna FORESTIPA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **68**
- SRM **35.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **70 C**, Time **20 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **70C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (83.3%)	80 %	4
Grain	Karmelowy Jasny	0.1 kg (2.8%)	80 %	180
Grain	Weyermann - Carafa II	0.3 kg (8.3%)	70 %	1100
Grain	Abbey Malt Weyermann	0.1 kg (2.8%)	75 %	45
Sugar	Candi Sugar, Amber	0.1 kg (2.8%)	78.3 %	148

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Citra	15 g	5 min	12 %
Boil	Cascade	15 g	5 min	6 %
Dry Hop	Citra	15 g	7 day(s)	12 %
Dry Hop	Cascade	15 g	7 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy Świerku	120 g	Boil	30 min
Flavor	Pędy Świerku	75 g	Boil	5 min
Flavor	Pędy Świerku	75 g	Secondary	7 day(s)