

# Black IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **90**
- SRM **41.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (80.6%)	79 %	8
Grain	Abbey Malt Weyermann	0.45 kg (7.3%)	75 %	40
Grain	Carafa III	0.45 kg (7.3%)	70 %	1300
Grain	Jęczmień palony	0.3 kg (4.8%)	55 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	42 g	60 min	13.7 %
Boil	Cascade	50 g	45 min	6.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis