

# Black IPA

- Gravity **16.8 BLG**
- ABV ---
- IBU **60**
- SRM **32.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (51%)	79 %	6
Grain	Strzegom Pilzneński	3 kg (38.2%)	80 %	4
Grain	Weyermann - Carafa II	0.5 kg (6.4%)	70 %	837
Grain	carahell	0.1 kg (1.3%)	70 %	25
Sugar	cukier	0.25 kg (3.2%)	100 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	5 min	9.4 %
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Boil	Willamette	25 g	15 min	4.7 %
Boil	Willamette	25 g	45 min	4.7 %
Boil	Amarillo	50 g	59 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5 g	Fermentis