

# BLACK IPA

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- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU ---
- SRM **28.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **52.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.5 liter(s)**
- Total mash volume **54 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **40.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **25.8 liter(s)** of **76C** water or to achieve **52.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	10 kg (73%)	80 %	8
Grain	Pszeniczny	1 kg (7.3%)	85 %	4
Grain	Briess - Carapils Malt	1 kg (7.3%)	74 %	3
Grain	Carafa III	1 kg (7.3%)	70 %	1034
Grain	Jęczmień niesłodowany	0.5 kg (3.6%)	75 %	2
Sugar	cukier brązowy	0.2 kg (1.5%)	100 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Simcoe	20 g	60 min	13.2 %
Mash	Simcoe	40 g	30 min	13.2 %
Mash	Simcoe	60 g	15 min	13.2 %
Whirlpool	Simcoe	80 g	0 min	13.2 %
Dry Hop	Sorachi Ace	80 g	5 day(s)	10 %
Dry Hop	Sorachi Ace	120 g	3 day(s)	10 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
WLP051 - California Ale V Yeast	Ale	Liquid	2000 ml	White Labs