

# Black IPA

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **46**
- SRM **56.5**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **0 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- 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**
- Temp **75 C**, Time **10 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**
- Keep mash **10 min** at **75C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (Weyermann)	5 kg (80.6%)	82.23 %	8
Grain	Carafa Special II (Weyermann)	0.5 kg (8.1%)	77.9 %	2934
Grain	Carapils (Briess)	0.5 kg (8.1%)	73 %	6
Grain	Biscuit Malt	0.2 kg (3.2%)	79 %	132

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	13 %
Boil	Willamette	30 g	20 min	5.4 %
Aroma (end of boil)	Cascade	60 g	0 min	7.2 %
Dry Hop	Simcoe	30 g	7 day(s)	11.9 %
Dry Hop	Cascade	60 g	0 day(s)	7.2 %