

# BLACK IPA #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **67**
- SRM **30.7**
- 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 **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (86.2%)	82 %	4
Grain	Weyermann - Carafa II	0.5 kg (8.6%)	70 %	1100
Grain	Weyermann - Melanoiden Malt	0.2 kg (3.4%)	81 %	53
Grain	Strzegom Karmel 150	0.1 kg (1.7%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	60 min	10 %
Boil	Cascade	50 g	45 min	5.8 %
Boil	Willamette	30 g	15 min	5 %
Dry Hop	Cascade	50 g	2 day(s)	6 %
First Wort	Cukier	15 g	60 min	1 %

## Yeasts

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