

# Black IPA

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **64**
- SRM **11.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **21.1 liter(s)** of strike water to **70.8C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (84.6%)	80 %	5
Grain	Abbey Malt Weyermann	0.5 kg (7.7%)	75 %	45
Grain	Słód Caramunich Typ II Weyermann	0.25 kg (3.8%)	73 %	120
Grain	Strzegom Czekoladowy jasny	0.25 kg (3.8%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	40 min	13.2 %
Boil	Mosaic	20 g	40 min	10 %
Boil	Simcoe	20 g	10 min	13.2 %
Boil	Centennial	15 g	10 min	10.5 %
Boil	Mosaic	15 g	10 min	10 %
Aroma (end of boil)	Equinox	15 g	2 min	13.1 %
Aroma (end of boil)	Simcoe	20 g	2 min	13.2 %
Aroma (end of boil)	Centennial	15 g	2 min	10.5 %

Dry Hop	Equinox	15 g	10 day(s)	13.1 %
Dry Hop	Mosaic	15 g	10 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min

### Notes

- carafa III dodane na 2 min sam koniec zacierania w 78°C  
*Mar 31, 2018, 6:36 PM*