

# Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **36**
- SRM **37.5**
- 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 **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.8 liter(s)**
- Total mash volume **38.3 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **29.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Flagon	5 kg (58.8%)	80 %	5
Grain	Strzegom Karmel 150	0.5 kg (5.9%)	75 %	100
Grain	Pszeniczny	0.5 kg (5.9%)	85 %	4
Grain	Viking Barwiący Obłuszczony	0.5 kg (5.9%)	65 %	1000
Grain	Weyermann - Carafa II	0.5 kg (5.9%)	70 %	837
Grain	płatki jęczmienne	0.5 kg (5.9%)	60 %	4
Grain	Weyermann - Carapils	1 kg (11.8%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	50 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis