

# Black Ipa

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **49**
- SRM **16.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.4 kg (72.7%)	80 %	5
Grain	Weyermann pszeniczny jasny	0.7 kg (21.2%)	80 %	6
Grain	Carafa	0.2 kg (6.1%)	70 %	664

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	60 min	15 %
Boil	Amora Preta	10 g	10 min	7.2 %
Boil	Galaxy	5 g	10 min	15 %
Aroma (end of boil)	Amora Preta	10 g	10 min	7.2 %
Aroma (end of boil)	Rody hodowlane	15 g	10 min	9.3 %
Dry Hop	Amora Preta	20 g	4 day(s)	7.2 %
Dry Hop	Rody hodowlane	15 g	4 day(s)	9.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Slant	100 ml	Fermentum Mobile
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