

# Black Ipa 1-800

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **44**
- SRM **27.7**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.09 kg (70.4%)	80 %	7
Grain	Briess - Carapils Malt	0.31 kg (7.1%)	74 %	3
Grain	Pszeniczny	0.31 kg (7.1%)	85 %	4
Grain	Carafa III	0.31 kg (7.1%)	70 %	1034
Grain	płatki jęczmienne	0.24 kg (5.5%)	60 %	4
Sugar	cukier	0.13 kg (3%)	100 %	1

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	6.19 g	60 min	10 %
Boil	Centennial	6.19 g	30 min	10.5 %
Boil	Citra	6.19 g	30 min	12 %
Boil	Citra	9.28 g	15 min	12 %
Boil	Centennial	9.28 g	15 min	10.5 %
Whirlpool	Centennial	4.88 g	30 min	10.5 %
Whirlpool	Citra	4.88 g	30 min	12 %
Dry Hop	Citra	7.51 g	3 day(s)	12 %
Dry Hop	Centennial	7.51 g	3 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	7.43 g	Fermentis