

# Black Rye IPA

- Gravity **16.1 BLG**
- ABV ---
- IBU **40**
- SRM **46.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.7 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **50.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.4 liter(s)**
- Total mash volume **40.5 liter(s)**

## Steps

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

## Mash step by step

- Heat up **30.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **30 liter(s)** of **76C** water or to achieve **50.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	7 kg (62.9%)	80 %	7
Grain	Pszeniczny	0.8 kg (7.2%)	85 %	4
Grain	Karmelowy żytni Strzegom	1 kg (9%)	75 %	150
Grain	cara aroma	0.16 kg (1.4%)	85 %	8
Grain	Strzegom Monachijski typ II	0.16 kg (1.4%)	79 %	22
Grain	Black (Patent) Malt	1 kg (9%)	55 %	985
Sugar	cukier	1 kg (9%)	99 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %
Boil	Cascade	25 g	45 min	6 %
Boil	Fuggles	25 g	15 min	4.5 %
Whirlpool	Cascade	25 g	0 min	6 %
Dry Hop	mouteka	25 g	6 day(s)	6.5 %
Dry Hop	Summer	25 g	6 day(s)	6.4 %
Dry Hop	Kohatu	25 g	6 day(s)	7.8 %

## Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale US-05	Ale	Dry	11 g	Fermentis