

# Black Rye IPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **53**
- SRM **30.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **27.9 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **21.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	4 kg (64.5%)	80 %	8
Grain	Rye Malt	1 kg (16.1%)	80 %	10
Grain	Cara Blonde - Castle Malting	0.5 kg (8.1%)	78 %	20
Grain	Crystal 150	0.2 kg (3.2%)	72 %	150
Grain	Strzegom pszenica prażona	0.5 kg (8.1%)	70 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	60 min	15.5 %
Boil	Citra	25 g	15 min	12 %
Aroma (end of boil)	Citra	25 g	0 min	12 %
Dry Hop	Simcoe	25 g	3 day(s)	13.2 %
Dry Hop	Sorachi Ace	25 g	3 day(s)	10 %
Dry Hop	Simcoe	25 g	3 day(s)	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11 g	Fermentis
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## Notes

- Pszenica palona na wygrzew  
*Aug 22, 2018, 5:19 PM*