

# Black Rye IPA

- Gravity **17.7 BLG**
- ABV ---
- IBU **69**
- SRM **40**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- liter(s)

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- liter(s) / kg
- Mash size --- liter(s)
- Total mash volume --- liter(s)

## Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **20 min**

## Mash step by step

- Heat up liter(s) of strike water to C
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **20 min** at **78C**
- Sparge using liter(s) of C water

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.5 kg (41.7%)	85 %	8
Grain	Weyermann - Vienna Malt	2 kg (33.3%)	81 %	9
Grain	Special B Malt	0.5 kg (8.3%)	65.2 %	425
Grain	Weyermann - Carafa III	0.25 kg (4.2%)	70 %	1399
Grain	Weyermann - Chocolate Wheat	0.25 kg (4.2%)	74 %	1066
Grain	Weyermann - Rye Malt	0.25 kg (4.2%)	85 %	8
Grain	Weyermann - Chocolate Rye	0.25 kg (4.2%)	20 %	666

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	13.5 %
Boil	Citra	20 g	30 min	13.5 %
Boil	Citra	20 g	15 min	13.5 %
Boil	Citra	20 g	5 min	13.5 %
Dry Hop	Citra	70 g	7 day(s)	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11.5 g	Safale