

Black Rye IPA

- Gravity **14.5 BLG**
- ABV ---
- IBU **62**
- SRM **38.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (30.8%)	79 %	6
Grain	Strzegom Pilzneński	2 kg (30.8%)	80 %	4
Grain	Żytni	2 kg (30.8%)	85 %	8
Grain	Weyermann - Carafa III	0.5 kg (7.7%)	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	30 g	60 min	10 %
Boil	Citra	30 g	30 min	12 %
Boil	Citra	15 g	5 min	12 %
Boil	Mosaic	15 g	5 min	10 %
Aroma (end of boil)	Citra	15 g	0 min	12 %
Aroma (end of boil)	Mosaic	15 g	0 min	10 %
Dry Hop	Citra	30 g	5 day(s)	12 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %

Yeasts

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