

## #5: RYE IPA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **65**
- SRM **4.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.9 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **15 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **74C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (60.3%)	80 %	5
Grain	Rye Malt	1 kg (17.2%)	63 %	10
Grain	Pilzneński	1 kg (17.2%)	81 %	4
Grain	Płatki owsiane	0.3 kg (5.2%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	25 g	60 min	13 %
Boil	Ahtanum	10 g	60 min	5 %
Aroma (end of boil)	Simcoe	20 g	15 min	13.2 %
Aroma (end of boil)	Chinook	10 g	15 min	13 %
Aroma (end of boil)	Chinook	15 g	3 min	13 %
Aroma (end of boil)	Ahtanum	20 g	3 min	5 %
Dry Hop	Mosaic	50 g	6 day(s)	10 %
Dry Hop	Ahtanum	60 g	6 day(s)	5 %

### Yeasts

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