

## #43 Rye IPa

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **60**
- SRM **7.2**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **17.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (52.6%)	80 %	4
Grain	Rye Malt	1.75 kg (30.7%)	63 %	10
Grain	Barley, Flaked	0.4 kg (7%)	70 %	4
Grain	Strzegom Red active	0.3 kg (5.3%)	75 %	36
Grain	Karmelowy Jasny 30EBC	0.2 kg (3.5%)	75 %	30
Grain	Strzegom Czekoladowy jasny	0.05 kg (0.9%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.8 %
Boil	Bramling Cross	30 g	20 min	6.1 %
Boil	African Queen	20 g	0 min	11.8 %
Boil	Equinox	20 g	0 min	14 %
Dry Hop	African Queen	30 g	4 day(s)	11.8 %
Dry Hop	Equinox	30 g	4 day(s)	14 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM54 Gorączka kalifornijska	Ale	Liquid	30 ml	Fermentum Mobile

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Other	łuska gryczana	100 g	Mash	0 min
Fining	whirlfloc	0.5 g	Boil	10 min