

## Rye IPA 15blg

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- Gravity **15.8 BLG**
- ABV ---
- IBU **77**
- SRM **7.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **15 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **33 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **51 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **22.8 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **10 min** at **51C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (69.2%)	80 %	4
Grain	Żytmi	1.5 kg (23.1%)	85 %	8
Grain	Strzegom Karmel 30	0.4 kg (6.2%)	75 %	30
Grain	Strzegom Karmel 150	0.1 kg (1.5%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	45 g	60 min	10 %
Boil	Citra	20 g	30 min	13 %
Boil	Citra	20 g	15 min	13 %
Aroma (end of boil)	Citra	30 g	5 min	13 %
Dry Hop	Citra	60 g	4 day(s)	12 %
Dry Hop	Amarillo	30 g	4 day(s)	9.5 %
Aroma (end of boil)	Cascade	15 g	5 min	6 %
Dry Hop	Cascade	15 g	4 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	30 ml	Fermentum Mobile