

# Rye IPA 15blg

- Gravity **16 BLG**
- ABV ---
- IBU **65**
- SRM **7.1**
- 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 **34.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **29.7 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **23.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **34.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (68.2%)	80 %	4
Grain	Żytni	1.5 kg (22.7%)	85 %	8
Grain	Strzegom Karmel 30	0.6 kg (9.1%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	45 g	60 min	10 %
Boil	Citra	25 g	15 min	12 %
Boil	Cascade	30 g	15 min	6 %
Boil	Citra	25 g	5 min	12 %
Dry Hop	Citra	50 g	4 day(s)	12 %
Dry Hop	Amarillo	30 g	4 day(s)	9.5 %

## Yeasts

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