

# Rye IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **56**
- SRM **5.3**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **16 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (73.2%)	81 %	4
Grain	Żytni	1 kg (24.4%)	85 %	8
Grain	Karmelowy Jasny 30EBC	0.1 kg (2.4%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Zeus Idaho 7	20 g	30 min	14 %
Aroma (end of boil)	Idaho 7	10 g	0 min	12.7 %
Whirlpool	Idaho 7	10 g	0 min	12.7 %
Dry Hop	Idaho 7	20 g	3 day(s)	12.7 %

## Yeasts

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