

# Żytnia IPA

- Gravity **15.7 BLG**
- ABV ---
- IBU **95**
- SRM **9.4**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **10 %**
- Size with trub loss **29.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **34.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **65 C**, Time **70 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **34.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzński	5 kg (62.5%)	81 %	4
Grain	Żytni	2.5 kg (31.3%)	85 %	8
Grain	Strzegom Karmel 150	0.25 kg (3.1%)	75 %	150
Grain	Strzegom Karmel 30	0.25 kg (3.1%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	70 min	16.1 %
Boil	Warrior	10 g	70 min	14.1 %
Boil	Fuggles	20 g	70 min	4.9 %
Boil	Sybilla	50 g	70 min	6.5 %
Boil	Willamette	10 g	15 min	5 %
Boil	Centennial	10 g	15 min	8.5 %
Boil	Simcoe	20 g	10 min	13 %
Aroma (end of boil)	Willamette	20 g	5 min	4.5 %
Aroma (end of boil)	Centennial	20 g	0 min	8.5 %
Dry Hop	Simcoe	30 g	5 day(s)	12 %
Dry Hop	Centennial	25 g	5 day(s)	8.5 %
Dry Hop	Columbus/Tomahawk/Zeus	20 g	5 day(s)	16.1 %

Dry Hop	Willamette	20 g	5 day(s)	4.5 %
---------	------------	------	----------	-------

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12 g	Safale