

## Żyto IPA II

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **31**
- SRM **8.4**
- Style **Rye IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **66 C**, Time **70 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (48.4%)	79 %	6
Grain	Żytmi	2 kg (32.3%)	85 %	8
Grain	Weyermann - Carapils	0.3 kg (4.8%)	78 %	4
Grain	Strzegom Karmel 30	0.3 kg (4.8%)	75 %	30
Grain	Caraaroma	0.1 kg (1.6%)	78 %	400
Grain	płatki żytnie	0.5 kg (8.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	20 min	15.5 %
Boil	Chinook	15 g	5 min	13 %
Boil	El Dorado	15 g	5 min	13 %
Whirlpool	Chinook	25 g	10 min	13 %
Whirlpool	El Dorado	25 g	10 min	13 %
Whirlpool	Equinox	20 g	10 min	13.1 %
Dry Hop	Chinook	30 g	5 day(s)	13 %
Dry Hop	El Dorado	30 g	5 day(s)	15 %
Dry Hop	Equinox	30 g	5 day(s)	13.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	mech irlandzki	5 g	Boil	15 min