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	Żytni	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 %

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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