Żytnia IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **62**
- SRM **6.9**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **62 min**
- Evaporation rate **10 %/h**
- Boil size **31.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **31.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilzneński	2.4 kg *(30.4%)*	81 %	4
Grain	Viking Pale Ale malt	3.4 kg *(43%)*	80 %	5
Grain	Żytni	1.1 kg *(13.9%)*	85 %	8
Grain	Strzegom Wiedeński	0.8 kg *(10.1%)*	79 %	10
Grain	Strzegom Karmel 150	0.2 kg *(2.5%)*	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus	9 g	62 min	15.8 %
Boil	Tomahawk	20 g	62 min	13.9 %
Boil	Centennial	10 g	30 min	8 %
Boil	Equinox	10 g	30 min	14.5 %
Boil	Chinook	10 g	30 min	9.1 %
Boil	Centennial	10 g	10 min	8 %
Boil	Equinox	10 g	10 min	14.5 %
Boil	Chinook	10 g	10 min	9.1 %
Aroma (end of boil)	Centennial	10 g	2 min	8 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Aroma (end of boil)	Equinox	10 g	2 min	14.5 %
Aroma (end of boil)	Chinook	10 g	2 min	9.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	fermentis