

# ŻYTANIA IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **75**
- SRM **7.4**
- Style **Rye IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **4 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **32.3 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg (66.7%)	80 %	7
Grain	Żytni	2 kg (26.7%)	85 %	8
Grain	Caraamber	0.5 kg (6.7%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	30 g	60 min	13.4 %
Boil	Equinox	15 g	30 min	13.4 %
Boil	Centennial	15 g	30 min	9.7 %
Boil	Equinox	15 g	15 min	13.4 %
Boil	Centennial	15 g	15 min	9.7 %
Boil	Equinox	20 g	5 min	13.4 %
Boil	Centennial	20 g	5 min	9.7 %
Dry Hop	Equinox	30 g	5 day(s)	13.4 %
Dry Hop	Centennial	30 g	5 day(s)	9.7 %

## Yeasts

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