

ŻYRAPA

- Gravity **18 BLG**
- ABV ---
- IBU **73**
- SRM **9.3**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **73C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (50%)	79 %	6
Grain	Żytni	1 kg (25%)	85 %	8
Grain	Bestmalz Carmel Pils	0.5 kg (12.5%)	75 %	5
Grain	Carahell	0.5 kg (12.5%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	10 g	60 min	10 %
Boil	Citra	15 g	60 min	12 %
Boil	Mosaic	5 g	30 min	10 %
Boil	Citra	5 g	30 min	12 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Aroma (end of boil)	Mosaic	10 g	10 min	10 %
Dry Hop	Citra	20 g	4 day(s)	12 %
Dry Hop	Mosaic	25 g	4 day(s)	10 %
Dry Hop	Pacific Jade	20 g	4 day(s)	13 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Herb	Trawa cytrynowa	15 g	Mash	10 min