

# IPA po polsku

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **3.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **20.2 liter(s)**

## Steps

- Temp **67 C**, Time **100 min**

## Mash step by step

- Heat up **15.4 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **100 min** at **67C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.5 kg (52.1%)	82 %	4
Grain	Żytni	0.5 kg (10.4%)	85 %	6
Grain	Pszeniczny	0.8 kg (16.7%)	85 %	4
Grain	Płatki owsiane	0.5 kg (10.4%)	60 %	3
Grain	Łuska ryżowa	0.5 kg (10.4%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	8 g	50 min	8 %
Boil	Zula	7 g	50 min	11 %
Boil	Amora Preta	7 g	50 min	10 %
Aroma (end of boil)	Zula	7 g	15 min	11 %
Aroma (end of boil)	Amora Preta	7 g	15 min	10 %
Aroma (end of boil)	Zula	10 g	2 min	11 %
Aroma (end of boil)	Amora Preta	10 g	2 min	10 %
Whirlpool	Zula	10 g	15 min	11 %
Whirlpool	Amora Preta	10 g	15 min	10 %
Dry Hop	Zula	20 g	5 day(s)	11 %
Dry Hop	Amora Preta	20 g	5 day(s)	10 %