

# Polska IPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **84**
- SRM **4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Flagon	5 kg (86.2%)	80 %	5
Grain	Płatki owsiane	0.4 kg (6.9%)	60 %	3
Grain	Płatki pszeniczne	0.4 kg (6.9%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	11.5 %
Boil	EXP 2/20	20 g	15 min	11.2 %
Boil	Książęcy	20 g	15 min	10.1 %
Boil	Książęcy	15 g	5 min	10 %
Boil	Exp	15 g	5 min	11 %
Boil	Książęcy	15 g	0 min	10 %
Boil	Exp	15 g	0 min	11 %
Whirlpool	Książęcy	50 g	0 min	10 %
15 minut 80 stopni				
Whirlpool	Exp	50 g	0 min	11 %
15 minut 80 stopni				
Boil	Magnat	30 g	60 min	12 %

## Yeasts

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