

# IPA?JARO

- Gravity **12.4 BLG**
- ABV ---
- IBU **75**
- SRM **6.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **22.6 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.1 kg (17.2%)	80 %	4
Grain	Strzegom Pale Ale	5 kg (78.1%)	79 %	6
Grain	carabelge	0.3 kg (4.7%)	80 %	35

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	40 g	60 min	13 %
Boil	Columbus/Tomahawk/Zeus	15 g	30 min	15.5 %
Boil	Citra	40 g	10 min	12 %
Boil	Cascade	40 g	0 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile

## Notes

- na zimno ok 150g chmielu  
70g cascade pl

60g simcoe  
20g citra  
*Jun 1, 2016, 10:22 PM*