

# IPAAAAA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **32**
- SRM **3.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **38.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **48.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **52 C**, Time **20 min**
- Temp **65 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **20 min** at **52C**
- Keep mash **20 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **28.9 liter(s)** of **76C** water or to achieve **48.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	6 kg (60%)	82 %	4
Grain	Pszeniczny	0.5 kg (5%)	85 %	4
Grain	Płatki pszeniczne	1 kg (10%)	85 %	3
Grain	Płatki owsiane	1.5 kg (15%)	85 %	3
Grain	Żytni	1 kg (10%)	85 %	8
Sugar	Milk Sugar (Lactose)	0 kg	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	60 g	40 min	11 %
Aroma (end of boil)	Cascade PL	30 g	0 min	4 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	pulpa z mango 1 warka	1600 g	Primary	3 day(s)
Flavor	earl grey 2 warka	50 g	Bottling	---
Other	kwiat hibiskusa	50 g	Boil	15 min

## Notes

- wszystko do 45 stopni 20 min przerwy  
1/3 na dekokcje  
65 stopni- 30 min  
72stopnie - 55 min  
gotowanie - 15 min  
*Jan 28, 2020, 10:01 PM*