

# IPA

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **31**
- SRM **6.3**
- 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 **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.2 kg (55.3%)	80 %	4
Grain	Strzegom Monachijski typ II	1.1 kg (14.5%)	79 %	22
Grain	Strzegom Wiedeński	1.3 kg (17.1%)	79 %	10
Grain	Płatki owsiane	0.4 kg (5.3%)	85 %	3
Adjunct	Pszenica niesłodowana	0.6 kg (7.9%)	75 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	20 g	30 min	17 %
Boil	Citra	10 g	20 min	12 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Aroma (end of boil)	Galaxy	10 g	5 min	15 %
Dry Hop	Galaxy	30 g	4 day(s)	15 %
Dry Hop	Citra	10 g	4 day(s)	12 %
Dry Hop	Waimea	10 g	4 day(s)	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis