

# IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **60**
- SRM **5.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **50 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **30 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (87%)	81 %	4
Grain	Płatki owsiane	0.1 kg (1.4%)	85 %	3
Grain	Pszeniczny	0.3 kg (4.3%)	85 %	4
Grain	Caramel/Crystal Malt - 10L	0.5 kg (7.2%)	75 %	20

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	50 g	60 min	11.7 %
Aroma (end of boil)	cashmere	50 g	2 min	8 %
Dry Hop	Nelson Sauvín	100 g	3 day(s)	11 %
Dry Hop	Citra	100 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile