

# IPA18

- Gravity **18.7 BLG**
- ABV **8.1 %**
- IBU **27**
- SRM **6.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.5 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **4.3 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3.4 kg (55.7%)	80 %	8
Grain	BESTMALZ - Best Pilsen	2.2 kg (36.1%)	80.5 %	4
Grain	Płatki owsiane	0.5 kg (8.2%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	13 g	60 min	9.5 %
Aroma (end of boil)	Amarillo	25 g	15 min	9.5 %
Whirlpool	Amarillo	25 g	0 min	9.5 %
Dry Hop	Amarillo	42 g	2 day(s)	9.5 %
Dry Hop	Citra	50 g	2 day(s)	12.9 %
Dry Hop	Nelson Sauvín	50 g	2 day(s)	11.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Slant	100 ml	Mangrove