

# Double IPA

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **74**
- SRM **4.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **16.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **100 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **100 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **4.3 liter(s)** of **76C** water or to achieve **16.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (75%)	81 %	4
Grain	Pszeniczny	1 kg (25%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra'21	35 g	45 min	13.4 %
Whirlpool	Citra'21	65 g	1 min	13.4 %
Dry Hop	Citra'21	150 g	3 day(s)	13.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	120 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Łuska ryżowa	80 g	Mash	120 min
Water Agent	Kwas fosforowy	3 g	Mash	120 min

1ml do zacierania, 2ml do wyładzania				
Fining	WhirlflocT	3 g	Boil	15 min
Water Agent	Kwas askorbinowy	2 g	Bottling	---