

# Double IPA

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **95**
- SRM **11.8**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.3 liter(s)**
- Total mash volume **36.4 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **27.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (65.9%)	81 %	4
Grain	Pszeniczny	2.5 kg (27.5%)	85 %	4
Grain	Żytni	0.5 kg (5.5%)	85 %	8
Grain	Jęczmień palony	0.1 kg (1.1%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	45 min	11 %
Whirlpool	Galaxy	25 g	15 min	15 %
Dry Hop	Galaxy	25 g	2 day(s)	15 %
Aroma (end of boil)	Magnum	30 g	20 min	13.5 %
Boil	Magnum	20 g	45 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Herb	trawa cytrynowa	20 g	Secondary	2 day(s)