

# double ipa

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **105**
- SRM **4.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (40%)	80 %	5
Grain	Viking Pilsner malt	2.5 kg (33.3%)	82 %	4
Adjunct	Płatki pszeniczne	0.5 kg (6.7%)	85 %	3
Adjunct	Płatki owsiane	0.5 kg (6.7%)	85 %	3
Grain	Pszeniczny	1 kg (13.3%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	45 min	15.5 %
Boil	Mosaic	20 g	15 min	10 %
Whirlpool	Citra	30 g	30 min	12 %
Dry Hop	Citra	30 g	4 day(s)	12 %
Whirlpool	Nelson Sauvín	30 g	30 min	11 %
Dry Hop	Nelson Sauvín	30 g	4 day(s)	11 %
Whirlpool	Rakau (NZ)	30 g	30 min	9.5 %
Dry Hop	Rakau (NZ)	30 g	4 day(s)	9.5 %
Whirlpool	Mosaic	30 g	30 min	10 %
Dry Hop	Mosaic	30 g	4 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	200 ml	safala