

# Single chop citra

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **12**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **74 C**, Time **5 min**

## Mash step by step

- Heat up **33 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **70C**
- Keep mash **5 min** at **74C**
- Sparge using **37.4 liter(s)** of **76C** water or to achieve **59.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	10 kg (90.9%)	80 %	5
Grain	Platki owsiane	1 kg (9.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	15 min	12 %
Aroma (end of boil)	Citra	30 g	5 min	12 %
Aroma (end of boil)	Citra	30 g	0 min	12 %
Whirlpool	Citra	90 g	0 min	12 %
Dry Hop	Citra	300 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis