

# Shotgun

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **33**
- SRM **5.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **13 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.5 kg (67.6%)	81 %	6
Grain	Monachijski	0.5 kg (13.5%)	80 %	16
Grain	Płatki owsiane	0.2 kg (5.4%)	85 %	3
Grain	Lager	0.5 kg (13.5%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	60 min	12 %
Aroma (end of boil)	Citra	10 g	15 min	12 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Dry Hop	Citra	30 g	4 day(s)	12 %
Dry Hop	Citra	20 g	2 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Notes

- Fermentacja burzliwa 7 dni-18stC,  
Fermentacja cicha 14 dni-12stC  
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