

# Orange milkshake IPA

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **26**
- SRM **4.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **17.8 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.43 kg (86.7%)	78 %	7
Grain	Monachijski	0.175 kg (4.4%)	80 %	16
Grain	Pszeniczny	0.15 kg (3.8%)	85 %	4
Grain	Płatki owsiane	0.2 kg (5.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	9 %
Aroma (end of boil)	Cascade PL	15 g	10 min	5.2 %
Whirlpool	Cascade PL	20 g	30 min	5.2 %
Dry Hop	Cascade PL	50 g	4 day(s)	5.2 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	Zest pomarańczowy	35 g	Boil	0 min
Flavor	Zest pomarańczowy	30 g	Secondary	7 day(s)
Other	Sok pomarańczowy do refermentacji	110 g	Bottling	---
Other	Laktoza	200 g	Boil	0 min

## Notes

- W soku jako dodatek waga cukru.  
*Jun 1, 2020, 12:44 PM*