

# APA Milkshake z Yuzu

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **3.9**
- Style **American Pale Ale**

## 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 **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (60%)	82 %	4
Grain	Viking Pale Ale malt	1 kg (20%)	80 %	5
Grain	Viking Wheat Malt	1 kg (20%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Calypso	15 g	60 min	14.7 %
Aroma (end of boil)	Citra	20 g	1 min	12.9 %
Whirlpool	Citra	30 g	10 min	12.9 %
Whirlpool	Rakau (NZ)	20 g	10 min	8.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	1000 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	1500 g	Boil	50 min

Flavor	Skórka słodkiej pomarańczy	20 g	Boil	15 min
Flavor	Curacao	20 g	Boil	15 min
Flavor	Trawa cytrynowa	10 g	Boil	15 min
Flavor	Werbena cytrynowa	10 g	Boil	15 min
Flavor	Puree z yuzu	1290 g	Secondary	7 day(s)