

# Milk Shake IPA

- Gravity **14.7 BLG**
- ABV ---
- IBU **55**
- SRM **3.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Sugar	Milk Sugar (Lactose)	0.5 kg (7.7%)	76.1 %	0
Grain	Pale ale	5 kg (76.9%)	80 %	4
Adjunct	Płatki owsiane	1 kg (15.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	13.2 %
Boil	Mosaic	20 g	30 min	10 %
Boil	Citra	30 g	30 min	12 %
Boil	Citra	30 g	5 min	12 %
Dry Hop	Mosaic	40 g	7 day(s)	10 %
Dry Hop	Columbus/Tomahawk/Zeus	20 g	7 day(s)	15.5 %
Dry Hop	Citra	40 g	7 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	125 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	Ananas	2000 g	Secondary	---