

# Milkshake IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **4.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **32.4 liter(s)**
- Total mash volume **43.2 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **32.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **29 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	8.5 kg (72%)	79 %	6
Grain	Wheat, Torrified	0.3 kg (2.5%)	79 %	4
Grain	Słód owsiany Fawcett	1 kg (8.5%)	61 %	5
Grain	BESTMALZ - Best Wheat Malt	0.5 kg (4.2%)	82 %	4
Grain	Płatki owsiane	0.5 kg (4.2%)	85 %	3
Sugar	Milk Sugar (Lactose)	1 kg (8.5%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	45 min	12 %
Aroma (end of boil)	Citra	20 g	15 min	12 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Whirlpool	Citra	20 g	20 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	500 ml	Fermentum Mobile