

# Milkshake IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **38**
- SRM **4.6**
- Style **American IPA**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (75%)	80 %	5
Grain	Strzegom Wiedeński	0.2 kg (3.3%)	79 %	10
Grain	Pszeniczny	0.2 kg (3.3%)	85 %	4
Grain	Carahell	0.1 kg (1.7%)	77 %	26
Grain	Płatki owsiane	0.5 kg (8.3%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (8.3%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Citra	10 g	30 min	12 %
Boil	Citra	5 g	15 min	12 %
Boil	Citra	10 g	5 min	12 %
Aroma (end of boil)	Citra	5 g	0 min	12 %
Dry Hop	Citra	15 g	7 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	---
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### Extras

Type	Name	Amount	Use for	Time
Other	Milk Sugar (Lactose)	500 g	Boil	15 min