

# MILKSHAKE ALE

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **7**
- SRM **3.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (61.1%)	80 %	5
Grain	Płatki owsiane	1.2 kg (18.3%)	85 %	3
Grain	Płatki pszeniczne	0.5 kg (7.6%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.85 kg (13%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Boil	El Dorado	2 g	10 min	15 %
Boil	Cashmere	8 g	10 min	6.7 %
Whirlpool	Citra	100 g	0 min	12 %
Dry Hop	Citra	50 g	2 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Fining	Whirlfloc	1 g	Boil	10 min
Water Agent	Chlorek Wapnia	3 g	Mash	70 min
Water Agent	Gips Piwowarski	3 g	Mash	70 min

## Notes

- W 4 dniu burzliwej dodane 2.25 kg mrozonych truskawek i 1 kg mrozonych wisni.  
*Mar 24, 2019, 11:09 PM*