

# milkshake

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **39**
- SRM **4.1**
- Style **Fruit Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 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 **63 C**, Time **40 min**
- Temp **68 C**, Time **50 min**
- Temp **76 C**, Time **55 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **50 min** at **68C**
- Keep mash **55 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (36.4%)	79 %	6
Grain	Strzegom Pilzneński	2 kg (36.4%)	80 %	4
Grain	Płatki owsiane	0.5 kg (9.1%)	85 %	3
Grain	Pszeniczny	1 kg (18.2%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Motueka	50 g	10 min	7 %
Boil	Challenger	40 g	45 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	1000 g	Boil	15 min

Flavor	maliny mrożone	2000 g	Secondary	---
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