

# Tropikalny Milkshake

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **37**
- SRM **5.4**
- Style **Spice, Herb, or Vegetable Beer**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.75 kg (50.7%)	81 %	4
Grain	Płatki pszeniczne	0.4 kg (11.6%)	80 %	3
Grain	Płatki owsiane	0.4 kg (11.6%)	80 %	3
Grain	Pszeniczny	0.65 kg (18.8%)	80 %	4
Sugar	Milk Sugar (Lactose)	0 kg	76.1 %	0
Grain	Abbey Malt Weyermann	0.25 kg (7.2%)	75 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	40 min	15.5 %
Whirlpool	Galaxy	100 g	5 min	15 %
Dry Hop	Vic Secret	50 g	3 day(s)	16.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
S-33	Ale	Slant	1.5 ml	Wyeast Labs

## Notes

- Galaxy 100g hopstand w 80 stopniach Celsjusza na 20 minut  
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