

# Tropical Tonka Milkshake IPA

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **38**
- SRM **4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (75.3%)	80 %	5
Grain	Platki owsiane	1 kg (15.1%)	85 %	3
Grain	Weyermann - Carapils	0.25 kg (3.8%)	78 %	4
Adjunct	mąka pszenna	0.14 kg (2.1%)	--- %	---
Sugar	Milk Sugar (Lactose)	0.25 kg (3.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	25 g	60 min	14.5 %
Boil	Equinox	20 g	5 min	12.8 %
Boil	Centennial	20 g	5 min	8.5 %
Whirlpool	Equinox	30 g	0 min	13.1 %
Whirlpool	Centennial	30 g	0 min	8.5 %
Dry Hop	Equinox	20 g	2 day(s)	13.1 %
Dry Hop	Centennial	20 g	2 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Liquid	270 ml	Wyeast Labs

### Extras

Type	Name	Amount	Use for	Time
Flavor	kawa cold brew	70 g	Bottling	3 min
Spice	tonka	20 g	Secondary	6 day(s)

### Notes

- laktoze dodac na ostatnie 20 min  
Kawa 70g na 6 dni  
tonka 17g na 6 dni  
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