

# Milkshake mango IPA 2023

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **25**
- SRM **3**
- 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 **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **67 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	5.5 kg (72.4%)	80 %	2
Grain	Płatki owsiane	1.5 kg (19.7%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.6 kg (7.9%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Dry Hop	Riwaka TB	100 g	3 day(s)	3.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Liquid	50 ml	Omega

## Extras

Type	Name	Amount	Use for	Time
Flavor	mango puree	900 g	Secondary	3 day(s)

## Notes

- Woda RO kran 1:1  
zacieranie 22.5L - kwas mlekowy 3ml  
wysładzanie 12.5L - kwas mlekowy 3 ml  
*Apr 15, 2023, 10:51 AM*