

# Milkshake Mango IPA moje

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **30**
- SRM **4.4**

## 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 **70 %**
- Liquor-to-grist ratio **2.84 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **70 C**, Time **0 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **70C**
- Keep mash **10 min** at **78C**
- 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	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Platki owsiane	1 kg (16.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	10 min	12.6 %
Aroma (end of boil)	Ekuanot	40 g	5 min	13.6 %
Aroma (end of boil)	Eureka!	40 g	5 min	18 %
Dry Hop	Ekuanot	60 g	3 day(s)	13.6 %
Dry Hop	Eureka!	60 g	3 day(s)	18 %

## Yeasts

Name	Type	Form	Amount	Laboratory
fm11	Ale	Slant	90 ml	fm

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	10 min