

# Milshake IPA Mango&Cz. Porz.

- Gravity **14.2 BLG**
- ABV **5.6 %**
- IBU **26.7**
- SRM **12.9**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **0 %**
- Size with trub loss **38 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **42.63 liter(s)**

## Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **28.2 liter(s)** of **76C** water or to achieve **42.63 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner Malt Organic	4.5 kg	81 %	9
Grain	Oats, Flaked (Briess)	1 kg	85 %	6
Sugar	Milk Sugar (Lactose)	1 kg	76.1 %	-1
Grain	Dark Liquid Extract	1.7 kg	78 %	91

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	100 g	60 min	4 %
Dry Hop	Mosaic (HBC 369)	50 g	3 day(s)	12.25 %

## Yeasts

Name	Type	Form	Amount	Laboratory
West Coast IPA	Ale	Liquid	ml	Wyeast