

# MangołChan

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **30**
- SRM **4.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (56.6%)	80 %	5
Grain	Viking Wheat Malt	1 kg (18.9%)	83 %	5
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.7%)	75 %	30
Grain	Płatki owsiane	0.5 kg (9.4%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (9.4%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	10 g	30 min	15.5 %
Boil	Amarillo	10 g	20 min	9.5 %
Boil	Amarillo	15 g	5 min	9.5 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	10 g	0 min	15.5 %
Dry Hop	Amarillo	25 g	7 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	20 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra - do kuchni	17 g	Boil	10 min
Flavor	Pulpa mango	850 g	Secondary	7 day(s)

## Notes

- zacieranie 65C 75 minut  
*Apr 26, 2018, 10:45 PM*