

# WARKA 09 - tropikalna

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **47**
- SRM **2.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5 kg (92.6%)	80.5 %	2
Grain	Płatki pszeniczne	0.2 kg (3.7%)	85 %	3
Grain	Płatki owsiane	0.2 kg (3.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	30 g	60 min	10 %
Aroma (end of boil)	Mandarina Bavaria	30 g	15 min	10 %
Dry Hop	Mandarina Bavaria	40 g	4 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis