

# Tropical Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **4.8**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**

## Mash step by step

- Heat up **9.6 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.7 kg (84.4%)	82 %	4
Grain	Słód owsiany Fawcett	0.1 kg (3.1%)	61 %	5
Grain	Abbey Malt Weyermann	0.2 kg (6.2%)	75 %	45
Grain	Płatki pszeniczne	0.2 kg (6.2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Cashmere	20 g	10 min	8.8 %
Aroma (end of boil)	Idaho	15 g	10 min	12.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast 644	Ale	Slant	200 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Ananas	400 g	Secondary	---
Flavor	Wiórki kokosowe	200 g	Secondary	---