

# Pirate Jack

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **67**
- SRM **11.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **13.3 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.9 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **9.3 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale - Viking Malt	2.5 kg (67.6%)	80 %	6
Grain	Karmelowy Czerwony	0.7 kg (18.9%)	75 %	50
Grain	Strzegom Monachijski typ II	0.5 kg (13.5%)	79 %	22

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	12 g	60 min	13 %
Boil	Simcoe	12 g	30 min	13.2 %
Boil	Citra	5 g	30 min	12 %
Aroma (end of boil)	Cascade	15 g	1 min	6 %
Aroma (end of boil)	Styrian Golding	15 g	1 min	3.3 %
Aroma (end of boil)	Simcoe	15 g	1 min	13.2 %

## Yeasts

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

## Notes

- Woda Żywiecki kryształ: Ca - 8.82; Na - 2.30; Mg - 4,86; Cl - 3,54; HCO<sub>3</sub> - 24,41; So<sub>4</sub> - 19.96  
PH Wody: 7  
Gips: 3.5g  
Chlorek wapnia: 1.1g  
Woda docelowa: Ca - 89.6; Na - 4.9; Mg - 2.3; HCO<sub>3</sub> - 50.4; So<sub>4</sub> - 150.1  
PH docelowe: 5.38

Schłodzenie brzezki i drożdży do 14°C. Zadanie drożdży.

Fermentacja burzliwa: 14°C otoczenia, piwo będzie miało 16°C, jak zacznie spadać, to podbicie temperatury otoczenia do 16°C.

Fermentacja cicha: 16°C otoczenia.

*Dec 7, 2023, 4:31 PM*