

# Półwieczny Copkopizg Januszowy

- Gravity **20.7 BLG**
- ABV **9.2 %**
- IBU **31**
- SRM **18.4**
- Style **Belgian Dark Strong Ale**

## Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **31.9 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **80 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **24.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **80 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (40.7%)	80 %	5
Grain	Pilzneński	2 kg (23.3%)	81 %	4
Grain	Monachijski	1 kg (11.6%)	80 %	16
Grain	Special B Malt	0.5 kg (5.8%)	65.2 %	315
Grain	Jęczmień palony	0.1 kg (1.2%)	55 %	985
Sugar	cukier kandyzowany biały	1 kg (11.6%)	100 %	---
Sugar	cukier kandyzowany brązowy	0.5 kg (5.8%)	100 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	50 g	60 min	7 %
Boil	Styrian Golding	50 g	10 min	3.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Mangrove Jack's M29 French Saison	Ale	Dry	20 g	Mangrove Jack's
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