

# warka29

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **18**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **23.7 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **17.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	hook head-pilsner	2.62 kg (44.3%)	80.5 %	3.5
Grain	best pale ale	1.1 kg (18.6%)	80.5 %	6
Grain	BESTMALZ - Best Minich	1.2 kg (20.3%)	80.5 %	15
Grain	Briess - Wheat Malt, White	0.25 kg (4.2%)	85 %	5
Grain	Honey Malt	0.25 kg (4.2%)	80 %	13
Grain	Briess - Carapils Malt	0.25 kg (4.2%)	74 %	3
Grain	Oats, Flaked	0.25 kg (4.2%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (USA)	32 g	40 min	3.75 %
Boil	Mosaic	20 g	10 min	11.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

## Notes

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

- po gotowaniu wyszlo-1052-13blg  
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