

# Warsztaty Kraków e.12

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **3.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **24.3 liter(s)**

## Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (100%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sabro	15 g	60 min	13.6 %
Boil	Amarillo	10 g	10 min	8 %
Boil	Sabro	10 g	10 min	13.6 %
Aroma (end of boil)	Amarillo	25 g	1 min	8 %
Aroma (end of boil)	Sabro	25 g	1 min	13.6 %
Dry Hop	Amarillo	25 g	3 day(s)	8 %
Dry Hop	Sabro	25 g	3 day(s)	13.6 %

## Notes

- 12,5 BLG  
17 litrów

23.02.2022r - chmielnie na zimno + CC

2.03.2022 r. - butelkowanie -16,5 litra piwa  
99 gram cukru w 300 ml wody  
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Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.