

# ŚwierkALE'18

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **40**
- SRM **4.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **66.5 C**, Time **120 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74.2C**
- Add grains
- Keep mash **120 min** at **66.5C**
- Keep mash **1 min** at **76C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bestmaltz - Pale Ale	5 kg (89.4%)	80 %	6
Grain	Karmelowy Jasny 30EBC	0.08 kg (1.4%)	75 %	30
Grain	Weyermann - Pale Wheat Malt	0.51 kg (9.1%)	85 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	24 g	70 min	11 %
Boil	Amarillo	25 g	15 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Pędy świerku	140 g	Boil	30 min
Flavor	Pędy świerku	100 g	Boil	2 min

Fining	whirfloc	2 g	Boil	10 min
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