

# Świerkowy APA M

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **53.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **33.9 liter(s)**
- Total mash volume **43.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **33.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **29.4 liter(s)** of **76C** water or to achieve **53.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7.2 kg (74.2%)	80 %	5
Grain	Briess - Rye Malt	1 kg (10.3%)	80 %	7
Grain	Oats, Flaked	0.7 kg (7.2%)	80 %	2
Grain	Wheat, Flaked	0.5 kg (5.2%)	77 %	4
Grain	Strzegom Monachijski typ I	0.3 kg (3.1%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	25 g	18 min	13.4 %
Boil	Citra	25 g	7 min	13.4 %
Boil	Talus	25 g	18 min	7.9 %
Boil	Talus	25 g	7 min	7.9 %
Dry Hop	Citra	50 g	3 day(s)	12 %
Dry Hop	Talus	50 g	3 day(s)	7.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11 g	---
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### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki świerku i sosny	100 g	Secondary	3 day(s)