

## #60 Świerkowe APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **30**
- SRM **5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **14.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (92.8%)	79 %	6
Grain	Acid Malt (zakwaszający)	0.1 kg (2.1%)	58.7 %	6
Grain	Strzegom Karmel 30	0.25 kg (5.2%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	300 ml	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	pȩdy świerku	300 g	Boil	40 min
Flavor	pȩdy świerku	200 g	Boil	1 min
Fining	whirlfloc	1 g	Boil	10 min
Other	Witamina A	4 g	Bottling	---