

## #21 Wyśłodkowa APA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **120**
- SRM **9.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **13.7 liter(s)**

### Steps

- Temp **65 C**, Time **90 min**

### Mash step by step

- Heat up **10 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Pale Ale Maris Otter	3.5 kg (94.6%)	81 %	5
Grain	Viking Malt - Karmelowy 300	0.1 kg (2.7%)	70 %	300
Grain	Weyermann Słod Caramunich (R) typ III	0.1 kg (2.7%)	70 %	140

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Strata	40 g	50 min	11.75 %
Whirlpool	Strata	60 g	30 min	11.75 %
Dry Hop	Strata	50 g	3 day(s)	11.75 %

### Yeasts

Name	Type	Form	Amount	Laboratory
OYL-501 Gulo™ Ale	Ale	Slant	600 ml	Omega Yeast
Starter 1L z gęstwy.				

### Extras

Type	Name	Amount	Use for	Time
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Fining	whirlfloc	2.2 g	Boil	10 min
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