

## Sour APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **87**
- SRM **5.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

### Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **7.1 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (63.8%)	80 %	4
Grain	Barley, Flaked	0.2 kg (8.5%)	70 %	4
Grain	Oats, Flaked	0.4 kg (17%)	80 %	2
Grain	Abbey Malt Weyermann	0.25 kg (10.6%)	75 %	45

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	15 g	15 min	13.1 %
Whirlpool	Equinox	35 g	20 min	13.1 %
Dry Hop	Equinox	50 g	3 day(s)	13.1 %
Whirlpool	Eureka!	20 g	20 min	18 %
Dry Hop	Eureka!	50 g	3 day(s)	18 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	40 ml	Fermentum Mobile

Lactobacillus Plantarum	Ale	Dry	2 g	Serowar.pl
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