

## #027 APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **36**
- SRM **3.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.5 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.6 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **30.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.3 kg (79.6%)	79 %	6
Grain	Płatki ryżowe	0.7 kg (13%)	85 %	0.7
Grain	Weyermann - Carapils	0.4 kg (7.4%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	25 g	60 min	8.3 %
Aroma (end of boil)	Amarillo	10 g	5 min	9.5 %
Aroma (end of boil)	Mosaic	40 g	5 min	10 %
Whirlpool	Amarillo	20 g	10 min	9.5 %
Whirlpool	Mosaic	20 g	10 min	10 %
Dry Hop	Citra	70 g	3 day(s)	12 %
Dry Hop	Amarillo	70 g	3 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	34.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc t	1.25 g	Boil	15 min