

## APA (przeskalowana na 15l)

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **44**
- SRM **6.7**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **18.4 liter(s)**

### Steps

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

### Mash step by step

- Heat up **14.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.41 kg (83.3%)	79 %	6
Grain	Pilzneński	0.55 kg (13.3%)	81 %	4
Grain	Karmelowy żytni Strzegom	0.14 kg (3.3%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Marynka	20.45 g	60 min	9.5 %
Boil	Cascade	6.82 g	60 min	6.5 %
Boil	Cascade	10.23 g	15 min	6.5 %
Boil	Cascade	10.23 g	5 min	6.5 %
Dry Hop	Cascade	34.09 g	4 day(s)	6.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	7.5 g	---