

## APA #1

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **35**
- SRM **4.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **36 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **2 min**

### Mash step by step

- Heat up **28 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (62.5%)	80 %	5
Grain	Pszeniczny	1 kg (12.5%)	85 %	4
Grain	Płatki owsiane	1 kg (12.5%)	60 %	3
Grain	Viking Pale Ale malt	1 kg (12.5%)	82 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Dragon	50 g	40 min	8.1 %
Aroma (end of boil)	Kazbek	50 g	10 min	6.16 %
Dry Hop	Kazbek	50 g	5 day(s)	6.16 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11.5 g	---