

## APA #1

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- Gravity **14.2 BLG**
- ABV ---
- IBU **63**
- SRM **6.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.6 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**
- Temp **75 C**, Time **1 min**

### Mash step by step

- Heat up **6.9 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **1 min** at **75C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (90.9%)	80 %	4
Grain	Strzegom Karmel 30	0.25 kg (9.1%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	10 g	45 min	13.4 %
Boil	Equinox	10 g	30 min	13.4 %
Boil	Equinox	10 g	15 min	13.4 %
Dry Hop	Equinox	30 g	7 day(s)	13.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
mangrove jack's m36 Liberty Bell Ale	Ale	Dry	5 g	Manrive's Jack