

## APA#

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- Gravity **14 BLG**
- ABV ---
- IBU **32**
- SRM **3.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **18.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **67 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **18.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (87.5%)	--- %	4
Grain	Płatki owsiane	0.5 kg (12.5%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	22 g	45 min	11 %
Dry Hop	Idaho 7	30 g	3 day(s)	12.8 %
Dry Hop	Azacca	30 g	3 day(s)	12 %
Dry Hop	El Dorado	30 g	3 day(s)	12.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Omega Yeast OYL-091 Hornindal Kveik	Ale	Liquid	250 ml	Fermentum Mobile