

## APA #3 Amarillo Single Hop

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **35**
- SRM **4.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **0 %**
- Size with trub loss **13 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **15.6 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	2.5 kg (83.3%)	80.5 %	6
Grain	BESTMALZ - Best Wheat Malt	0.5 kg (16.7%)	82 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	8.8 %
Boil	Amarillo	30 g	0 min	8.8 %
Dry Hop	Amarillo	20 g	5 day(s)	8.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	---

### Extras

Type	Name	Amount	Use for	Time
Finning	Whirlfloc	1.25 g	Boil	5 min