

## apa

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **67**
- SRM **4.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **53 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **67.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	9.49 kg (79.1%)	85 %	7
Grain	Weyermann - Pilsner Malt	2.5 kg (20.9%)	81 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	70 g	60 min	15.5 %
Boil	Sabro	60 g	10 min	15.8 %
Boil	Amarillo	50 g	5 min	9.5 %
Boil	sabro	30 g	5 min	15.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale