

## Sour apa

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- Gravity **7.1 BLG**
- ABV **2.7 %**
- IBU **11**
- SRM **3.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **45 C**, Time **15 min**
- Temp **68 C**, Time **30 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **30 min** at **68C**
- Sparge using **24.9 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (85.7%)	81 %	4
Grain	Abbey Castle	0.25 kg (7.1%)	80 %	45
Grain	Słód owsiany Fawcett	0.25 kg (7.1%)	61 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	15 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	Fermentis