

## ppa 389

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **3.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**

### Mash step by step

- Heat up **24 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (100%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	marynka	50 g	30 min	8 %
Boil	Izabella	50 g	15 min	4 %