

## #64 APA Galaxy Cascade Centennial

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **4.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **13.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.55 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.3 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **9.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **13.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Mep	2.2 kg (81.5%)	81 %	4
Grain	Abbey Malt Weyermann	0.15 kg (5.6%)	75 %	45
Grain	Weyermann - Carapils	0.15 kg (5.6%)	78 %	8
Grain	Płatki owsiane	0.2 kg (7.4%)	70 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	5 g	60 min	11 %
Boil	Centennial	25 g	5 min	9 %
Boil	Galaxy	25 g	5 min	15 %
Dry Hop	Galaxy	15 g	3 day(s)	15 %
Dry Hop	Cascade	35 g	3 day(s)	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
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Water Agent	Gips piwowarski	1 g	Boil	30 min
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