

## #102 APA Vic Secret+Orbit

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **96**
- SRM **3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **74.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Lager	4.5 kg (90%)	82 %	3
Grain	Malteurop Wheat	0.5 kg (10%)	86.8 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vic Secret	10 g	60 min	16.3 %
Boil	Orbit	10 g	60 min	9.8 %
Boil	Vic Secret	15 g	20 min	16.3 %
Boil	Orbit	15 g	20 min	9.8 %
Boil	Vic Secret	25 g	0 min	16.3 %
Boil	Orbit	25 g	0 min	9.8 %
Whirlpool	Vic Secret	50 g	30 min	16.3 %
Whirlpool	Orbit	50 g	30 min	9.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar