

## #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    |