

# Zula APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **36**
- SRM **11.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.9 liter(s)**
- Total mash volume **10.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **7.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **12.9 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 2 kg (75.5%)   | 80 %  | 7   |
| Grain | Caraaroma              | 0.1 kg (3.8%)  | 78 %  | 400 |
| Grain | Biscuit Malt           | 0.15 kg (5.7%) | 79 %  | 45  |
| Grain | Abbey Castle           | 0.1 kg (3.8%)  | 80 %  | 45  |
| Grain | Pszeniczny             | 0.3 kg (11.3%) | 85 %  | 4   |

## Hops

| Use for    | Name | Amount | Time   | Alpha acid |
|------------|------|--------|--------|------------|
| Boil       | Zula | 10 g   | 30 min | 9.7 %      |
| First Wort | Zula | 10 g   | 0 min  | 9.7 %      |
| Boil       | Zula | 10 g   | 60 min | 9.7 %      |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale  | Dry  | 10 g   | Danstar    |