

40' APA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **53**
- SRM **7.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24.4 liter(s)**
- Total mash volume **30.5 liter(s)**

Steps

- Temp **62 C**, Time **90 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **24.4 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **90 min** at **62C**
- Keep mash **2 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (82%) | 80 % | 5 |
| Grain | Strzegom Karmel 600 | 0.1 kg (1.6%) | 68 % | 601 |
| Grain | Pszeniczny | 1 kg (16.4%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Zula | 30 g | 60 min | 11.1 % |
| Whirlpool | Sabro | 15 g | 60 min | 14.9 % |
| Whirlpool | Citra | 15 g | 60 min | 12.9 % |
| Whirlpool | Amarillo | 15 g | 60 min | 8.5 % |
| Dry Hop | Citra | 35 g | 5 day(s) | 12.9 % |
| Dry Hop | Sabro | 35 g | 5 day(s) | 14.9 % |
| Dry Hop | Amarillo | 35 g | 5 day(s) | 8.5 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 12.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 2.5 g | Boil | 10 min |