

# APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.3 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (90.9%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 0.5 kg (9.1%) | 85 %  | 4   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 5 g    | 50 min   | 15.5 %     |
| Boil                | Columbus/Tomahawk/Zeus | 5 g    | 30 min   | 15.5 %     |
| Aroma (end of boil) | Citra                  | 5 g    | 15 min   | 12 %       |
| Aroma (end of boil) | Simcoe                 | 5 g    | 15 min   | 13.2 %     |
| Aroma (end of boil) | Cascade                | 5 g    | 15 min   | 7.1 %      |
| Aroma (end of boil) | Citra                  | 10 g   | 10 min   | 12 %       |
| Aroma (end of boil) | Simcoe                 | 10 g   | 10 min   | 13.2 %     |
| Aroma (end of boil) | Cascade                | 10 g   | 10 min   | 7.1 %      |
| Aroma (end of boil) | Citra                  | 10 g   | 5 min    | 12 %       |
| Aroma (end of boil) | Simcoe                 | 10 g   | 5 min    | 13.2 %     |
| Aroma (end of boil) | Cascade                | 10 g   | 5 min    | 7.1 %      |
| Whirlpool           | Citra                  | 5 g    | 0 min    | 12 %       |
| Whirlpool           | Simcoe                 | 20 g   | 0 min    | 13.2 %     |
| Whirlpool           | Cascade                | 10 g   | 0 min    | 7.1 %      |
| Dry Hop             | Citra                  | 20 g   | 5 day(s) | 12 %       |
| Dry Hop             | Simcoe                 | 5 g    | 5 day(s) | 13.2 %     |
| Dry Hop             | Cascade                | 15 g   | 5 day(s) | 7.1 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |