

## White IPA \_ test

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **36**
- SRM **3.6**
- Style **White IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **6 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | pilzneński Viking Malt      | 3.5 kg (53.8%) | 80 %  | 5   |
| Grain | Płatki pszeniczne           | 2.4 kg (36.9%) | 70 %  | 1   |
| Grain | płatki owsiane błyskawiczne | 0.6 kg (9.2%)  | 70 %  | 1   |

### Hops

| Use for             | Name                        | Amount | Time   | Alpha acid |
|---------------------|-----------------------------|--------|--------|------------|
| Boil                | Warrior (USA) - granulát    | 15 g   | 60 min | 15.1 %     |
| Boil                | Ekuanot (USA) - granulát    | 5 g    | 20 min | 16.1 %     |
| Boil                | Amarillo (USA) - granulát   | 5 g    | 20 min | 7.5 %      |
| Boil                | Centennial (USA) - granulát | 5 g    | 20 min | 8.5 %      |
| Aroma (end of boil) | Ekuanot (USA) - granulát    | 10 g   | 5 min  | 16.1 %     |
| Aroma (end of boil) | Amarillo (USA) - granulát   | 10 g   | 5 min  | 7.5 %      |

|                     |                             |      |          |        |
|---------------------|-----------------------------|------|----------|--------|
| Aroma (end of boil) | Centennial (USA) - granulat | 10 g | 5 min    | 8.5 %  |
| Whirlpool           | Ekuanot (USA) - granulat    | 15 g | 0 min    | 16.1 % |
| Whirlpool           | Amarillo (USA) - granulat   | 15 g | 0 min    | 7.5 %  |
| Whirlpool           | Centennial (USA) - granulat | 15 g | 0 min    | 8.5 %  |
| Dry Hop             | Ekuanot (USA) - granulat    | 20 g | 3 day(s) | 16.1 % |
| Dry Hop             | Amarillo (USA) - granulat   | 20 g | 3 day(s) | 7.5 %  |
| Dry Hop             | Centennial (USA) - granulat | 20 g | 3 day(s) | 8.5 %  |

## Yeasts

| Name               | Type  | Form  | Amount | Laboratory       |
|--------------------|-------|-------|--------|------------------|
| FM20 Białe Walonki | Wheat | Slant | 500 ml | Fermentum Mobile |

## Extras

| Type   | Name                      | Amount | Use for | Time  |
|--------|---------------------------|--------|---------|-------|
| Flavor | Skórka pomarańczy         | 100 g  | Boil    | 5 min |
| Spice  | Kolendra                  | 10 g   | Boil    | 5 min |
| Herb   | Rumianek saszetka x 2     | 3 g    | Boil    | 5 min |
| Flavor | curacao                   | 20 g   | Boil    | 5 min |
| Flavor | Skórka cytryny            | 10 g   | Boil    | 5 min |
| Flavor | Skórka grejfruta różowego | 10 g   | Boil    | 5 min |
| Flavor | Skórka mandarynki         | 10 g   | Boil    | 5 min |