

# White

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **47**
- SRM **7.6**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount         | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Monachijski typ II | 2 kg (37%)     | 79 %  | 22  |
| Grain | Pszeniczny         | 1.5 kg (27.8%) | 82 %  | 4   |
| Grain | Pale Ale           | 1 kg (18.5%)   | 80 %  | 5   |
| Grain | Carapils           | 0.5 kg (9.3%)  | 78 %  | 4   |
| Grain | Cookie Viking Malt | 0.2 kg (3.7%)  | 75 %  | 50  |
| Sugar | cukier             | 0.2 kg (3.7%)  | 100 % | --- |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Equinox  | 20 g   | 60 min | 16.1 %     |
| Aroma (end of boil) | Amarillo | 30 g   | 5 min  | 9.5 %      |
| Aroma (end of boil) | Equinox  | 15 g   | 5 min  | 16.1 %     |
| Aroma (end of boil) | Citra    | 10 g   | 5 min  | 13.3 %     |

## Yeasts

| Name               | Type | Form  | Amount | Laboratory |
|--------------------|------|-------|--------|------------|
| FM20 Białe Walonki | Ale  | Slant | 300 ml | ---        |

## Extras

| Type        | Name               | Amount | Use for | Time   |
|-------------|--------------------|--------|---------|--------|
| Fining      | Whirlfloc T        | 1 g    | Boil    | 5 min  |
| Water Agent | Chlorek wapnia 33% | 5 g    | Mash    | 70 min |