

# Jakiś Biały!

- Gravity **15.2 BLG**
- ABV ---
- IBU **50**
- SRM **5**
- 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 **70 min**
- Evaporation rate **27 %/h**
- Boil size **34.7 liter(s)**

## Mash information

- Mash efficiency **73 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **34.7 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (52.9%)   | 80 %  | 4   |
| Grain | Strzegom Pale Ale   | 1 kg (17.6%)   | 79 %  | 6   |
| Grain | Strzegom Pszeniczny | 1.02 kg (18%)  | 81 %  | 6   |
| Grain | Płatki owsiane      | 0.5 kg (8.8%)  | 85 %  | 3   |
| Grain | Karmelowy           | 0.15 kg (2.6%) | 75 %  | 35  |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 20 g   | 65 min | 15.5 %     |
| Boil                | Columbus/Tomahawk/Zeus | 5 g    | 30 min | 15.5 %     |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 5 g    | 10 min | 15.5 %     |
| Boil                | Mosaic                 | 2 g    | 30 min | 10 %       |
| Boil                | Centennial             | 2 g    | 30 min | 10.5 %     |
| Aroma (end of boil) | Mosaic                 | 3 g    | 10 min | 10 %       |
| Aroma (end of boil) | Centennial             | 3 g    | 10 min | 10.5 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |       |        |         |
|--------------|-----|-------|--------|---------|
| Safbrew S-33 | Ale | Slant | 250 ml | Safbrew |
|--------------|-----|-------|--------|---------|

### Extras

| Type   | Name            | Amount | Use for | Time   |
|--------|-----------------|--------|---------|--------|
| Flavor | Zest pomarańczy | 58 g   | Boil    | 15 min |
| Flavor | Zest limonki    | 40 g   | Boil    | 15 min |
| Flavor | Kolendra        | 20 g   | Boil    | 15 min |
| Flavor | Zest mandarynek | 18 g   | Boil    | 15 min |