

# Białas

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **33**
- SRM **5.7**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 2.1 kg (30.9%) | 80 %  | 5   |
| Grain | Pszeniczny                 | 2.1 kg (30.9%) | 85 %  | 4   |
| Grain | Strzegom Monachijski typ I | 2.1 kg (30.9%) | 79 %  | 16  |
| Grain | Płatki pszeniczne          | 0.5 kg (7.4%)  | 85 %  | 3   |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | lunga    | 30 g   | 60 min | 11 %       |
| Boil                | Amarillo | 15 g   | 15 min | 9.5 %      |
| Aroma (end of boil) | Amarillo | 15 g   | 0 min  | 9.5 %      |
| Aroma (end of boil) | Citra    | 15 g   | 0 min  | 12 %       |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | ---        |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |                   |      |      |        |
|-------|-------------------|------|------|--------|
| Spice | kolendra          | 10 g | Boil | 10 min |
| Spice | kolendra          | 10 g | Boil | 5 min  |
| Spice | skórka pomarańczy | 60 g | Boil | 0 min  |