

# Bramy karaibów - Witbier

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **15**
- SRM **3.3**
- Style **Witbier**

## 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 **27.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński        | 2.5 kg (55.6%) | 81 %  | 4   |
| Grain | Płatki pszeniczne | 1 kg (22.2%)   | 60 %  | 3   |
| Grain | Pszeniczny        | 1 kg (22.2%)   | 85 %  | 4   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 30 g   | 60 min | 2.9 %      |
| Boil    | Marynka           | 5 g    | 60 min | 7.9 %      |

## Yeasts

| Name               | Type  | Form   | Amount | Laboratory       |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 40 ml  | Fermentum Mobile |

## Extras

| Type   | Name                       | Amount | Use for | Time   |
|--------|----------------------------|--------|---------|--------|
| Flavor | Skórki gorzkiej pomarańczy | 20 g   | Boil    | 10 min |
| Flavor | Skórki słodkiej pomarańczy | 20 g   | Boil    | 10 min |
| Spice  | Kolendra indyjska          | 20 g   | Boil    | 10 min |
| Spice  | Trawa cytrynowa            | 20 g   | Boil    | 10 min |