

Upgradowany Żywiec Białe

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **18**
- SRM **2.4**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.5 liter(s)**

Steps

- Temp **52 C**, Time **25 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **25 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|----------------|--------|-----|
| Grain | Heidelberg | 2 kg (54.1%) | 80.5 % | 2 |
| Grain | Pszeniczny | 0.5 kg (13.5%) | 85 % | 4 |
| Adjunct | Pszenica niesłodowana | 1 kg (27%) | 75 % | 3 |
| Grain | Płatki owsiane | 0.2 kg (5.4%) | 85 % | 3 |

Hops

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

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's - Belgian Wit M21 | Wheat | Dry | 10 g | Mangrove Jack's |

Extras

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

| | | | | |
|-------|----------|------|------|--------|
| Spice | Kolendra | 15 g | Boil | 10 min |
| Spice | Curacao | 15 g | Boil | 10 min |