

# Biały Wilk- Imperialny Witbier

- Gravity **17.6 BLG**
- ABV ---
- IBU **45**
- SRM **6.7**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale   | 3.6 kg (50%)   | 79 %  | 6   |
| Grain | Strzegom pszeniczny | 2.4 kg (33.3%) | 81 %  | 6   |
| Grain | Wheat, Flaked       | 1.2 kg (16.7%) | 79 %  | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Citra   | 25 g   | 60 min | 12 %       |
| Boil    | Equinox | 10 g   | 60 min | 13.1 %     |
| Boil    | Equinox | 15 g   | 5 min  | 13.1 %     |
| Boil    | Citra   | 15 g   | 5 min  | 12 %       |

## Yeasts

| Name                            | Type  | Form  | Amount | Laboratory |
|---------------------------------|-------|-------|--------|------------|
| Gozdawa Classic Belgian Witbier | Wheat | Slant | 300 ml | ---        |

## Extras

| Type  | Name                              | Amount | Use for | Time  |
|-------|-----------------------------------|--------|---------|-------|
| Spice | Kolendra                          | 20 g   | Boil    | 5 min |
| Spice | Skórka pomarańczowa kandyzowana   | 30 g   | Boil    | 5 min |
| Spice | Skórka pomarańczowa świeżo starta | 1 g    | Boil    | 5 min |
| Spice | Skórka cytrynowa starta           | 1 g    | Boil    | 5 min |

## Notes

- Świeża skórka starta z jednej cytryny i jednej pomarańczy.  
*Apr 24, 2016, 10:44 PM*