

# Witkacyk edycja 2019

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **34**
- SRM **3.9**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **8.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name          | Amount         | Yield | EBC |
|-------|---------------|----------------|-------|-----|
| Grain | Pilzneński    | 1.5 kg (55.6%) | 81 %  | 4   |
| Grain | Wheat, Flaked | 1.2 kg (44.4%) | 77 %  | 4   |

## Hops

| Use for | Name                             | Amount | Time     | Alpha acid |
|---------|----------------------------------|--------|----------|------------|
| Boil    | Magnat                           | 10 g   | 60 min   | 11.2 %     |
| Boil    | Galaxy+Centennial+Amarillo+Citra | 13 g   | 5 min    | 15 %       |
| Dry Hop | Galaxy                           | 15 g   | 1 day(s) | 15 %       |

## Yeasts

| Name           | Type | Form | Amount | Laboratory |
|----------------|------|------|--------|------------|
| Danstar Abbaye | Ale  | Dry  | 11 g   | ---        |

## Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | kolendra | 10 g   | Boil    | 10 min |
| Spice | curacao  | 10 g   | Boil    | 10 min |

|       |                     |      |           |          |
|-------|---------------------|------|-----------|----------|
| Spice | skórka z pomarańczy | 10 g | Boil      | 10 min   |
| Spice | werbena cytrynowa   | 10 g | Boil      | 10 min   |
| Spice | curacao             | 10 g | Secondary | 5 day(s) |
| Spice | skórka z pomarańczy | 10 g | Secondary | 5 day(s) |
| Spice | werbena cytrynowa   | 10 g | Secondary | 5 day(s) |
| Spice | kolendra            | 10 g | Secondary | 5 day(s) |