

# Witbier Daniel

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **14**
- SRM **3.5**
- Style **Witbier**

## 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 **15 %/h**
- Boil size **33.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

## Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilzneński        | 3 kg (49.2%)   | 81 %  | 4   |
| Grain | Pszeniczny        | 1 kg (16.4%)   | 85 %  | 4   |
| Grain | Płatki pszeniczne | 2.1 kg (34.4%) | 71 %  | 3   |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnat | 20 g   | 60 min | 7.8 %      |

## Yeasts

| Name | Type | Form   | Amount  | Laboratory       |
|------|------|--------|---------|------------------|
| FM23 | Ale  | Liquid | 2.08 ml | Fermentum Mobile |

## Extras

| Type  | Name                       | Amount | Use for | Time  |
|-------|----------------------------|--------|---------|-------|
| Spice | Kolendra                   | 20 g   | Boil    | 7 min |
| Spice | Curacao                    | 10 g   | Boil    | 7 min |
| Spice | Skórka słodkiej pomarańczy | 10 g   | Boil    | 7 min |

## Notes

- Połowa leci na ok. 1,5 kg truskawek  
*Jul 17, 2019, 10:11 AM*