

# kwaśny witold

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU ---
- SRM **3.5**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **52 C**, Time **30 min**
- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **60 min** at **66C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.5 kg (38.5%) | 80 %  | 4   |
| Grain | Strzegom Pszeniczny | 1.5 kg (23.1%) | 81 %  | 6   |
| Grain | Płatki pszeniczne   | 2 kg (30.8%)   | 85 %  | 3   |
| Grain | Płatki owsiane      | 0.5 kg (7.7%)  | 85 %  | 3   |

## Hops

| Use for             | Name   | Amount | Time  | Alpha acid |
|---------------------|--------|--------|-------|------------|
| Aroma (end of boil) | Simcoe | 50 g   | 0 min | 13.2 %     |

## Extras

| Type  | Name              | Amount | Use for | Time   |
|-------|-------------------|--------|---------|--------|
| Spice | kolendra          | 10 g   | Boil    | 5 min  |
| Spice | curacao           | 10 g   | Boil    | 5 min  |
| Spice | bergamotka        | 5 g    | Boil    | 10 min |
| Spice | werbena cytrynowa | 10 g   | Boil    | 0 min  |
| Spice | mięta nana        | 20 g   | Boil    | 0 min  |
| Other | łuska ryżowa      | 250 g  | Mash    | 0 min  |