

## kwass

- Gravity **9.9 BLG**
- ABV ---
- IBU **40**
- SRM **4.6**
- Style **Berliner Weisse**

### 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 **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale          | 3 kg (66.7%)   | 79 %  | 6   |
| Grain | Weyermann pszeniczny jasny | 1.5 kg (33.3%) | 80 %  | 6   |

### Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Galaxy | 50 g   | 15 min | 15 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-05 | Ale  | Dry  | 14 g   | Safale     |

### Extras

| Type   | Name                     | Amount | Use for   | Time  |
|--------|--------------------------|--------|-----------|-------|
| Flavor | Ananas                   | 1000 g | Secondary | ---   |
| Other  | Bakterie kwasu mlekowego | 30 g   | Secondary | ---   |
| Spice  | zest z grejfrut          | 40 g   | Boil      | 1 min |