

## a'la APA Warka nr 9

- Gravity **12.1 BLG**
- ABV ---
- IBU **23**
- SRM **5.6**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount          | Yield | EBC |
|-------|---------------------------|-----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3 kg (70.6%)    | 85 %  | 7   |
| Grain | Strzegom pszeniczny       | 1.25 kg (29.4%) | 81 %  | 6   |

### Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | lunga   | 10 g   | 50 min   | 11.6 %     |
| Boil    | Citra   | 10 g   | 5 min    | 13.5 %     |
| Boil    | Equinox | 10 g   | 5 min    | 13.4 %     |
| Boil    | Mosaic  | 10 g   | 5 min    | 11.7 %     |
| Dry Hop | Citra   | 20 g   | 3 day(s) | 13.5 %     |
| Dry Hop | Equinox | 20 g   | 3 day(s) | 13.4 %     |
| Dry Hop | Mosaic  | 20 g   | 3 day(s) | 11.7 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |