

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 |