

Citrowy włajaż włajaż

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **31**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.55 kg (70.8%) | 80 % | 5 |
| Grain | Strzegom Karmel 30 | 0.42 kg (11.7%) | 75 % | 30 |
| Grain | Pszeniczny | 0.42 kg (11.7%) | 85 % | 4 |
| Adjunct | Płatki owsiane | 0.21 kg (5.8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|---------|----------|------------|
| Boil | Citra | 8.5 g | 60 min | 14.2 % |
| Boil | Citra | 8.5 g | 30 min | 14.2 % |
| Dry Hop | Citra | 10 g | 4 day(s) | 12 % |
| Aroma (end of boil) | Amarillo | 12.75 g | 5 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 9.78 g | Fermentis |