

APkA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **40**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

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

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (72.7%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (9.1%) | 85 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (3.6%) | 75 % | 30 |
| Grain | Płatki owsiane | 0.5 kg (9.1%) | 85 % | 3 |
| Grain | Słód owsiany Fawcett | 0.3 kg (5.5%) | 61 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|----------|------------|
| Aroma (end of boil) | Citra | 25 g | 15 min | 12.5 % |
| Aroma (end of boil) | El Dorado | 25 g | 15 min | 11 % |
| 30min 80°C | | | | |
| Aroma (end of boil) | Amarillo | 25 g | 15 min | 7.8 % |
| 30min 80°C | | | | |
| Dry Hop | El Dorado | 55 g | 2 day(s) | 11 % |
| Dry Hop | Amarillo | 50 g | 2 day(s) | 7.8 % |
| Dry Hop | Citra | 45 g | 2 day(s) | 12.5 % |

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|-------------|-------------|---------------|-------------------|
| WLP051 - California Ale V Yeast | Ale | Liquid | 200 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|---------------|----------------|-------------|
| Fining | whirlfloc t | 2.5 g | Boil | 10 min |
| Water Agent | gips piwowarski | 2 g | Mash | 0 min |