

# polska apa

---

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **3.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **77C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount      | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (100%) | 80 %  | 5   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Puławski | 10 g   | 60 min   | 8.9 %      |
| Boil                | Sybilla  | 30 g   | 30 min   | 4.9 %      |
| Aroma (end of boil) | Sybilla  | 30 g   | 5 min    | 4.9 %      |
| Dry Hop             | Sybilla  | 40 g   | 3 day(s) | 4.9 %      |

## Yeasts

| Name   | Type | Form  | Amount | Laboratory |
|--------|------|-------|--------|------------|
| wlp644 | Ale  | Slant | 100 ml | white labs |