

## APA Patryka

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **12**
- SRM **3.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.27 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.9 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **24.2 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

### Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt  | 5.5 kg (90.2%) | 80 %  | 5   |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (3.3%)  | 75 %  | 30  |
| Grain | Pszeniczny            | 0.4 kg (6.6%)  | 85 %  | 4   |

### Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Galaxy     | 10 g   | 60 min   | 14.5 %     |
| Whirlpool | Cascade    | 11 g   | 1 min    | 7.1 %      |
| Whirlpool | Centennial | 11 g   | 1 min    | 9.4 %      |
| Whirlpool | Amarillo   | 15 g   | 1 min    | 8.8 %      |
| Dry Hop   | Cascade    | 20 g   | 4 day(s) | 7.1 %      |
| Dry Hop   | Centennial | 20 g   | 4 day(s) | 9.4 %      |
| Dry Hop   | Amarillo   | 25 g   | 4 day(s) | 8.8 %      |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |