

Polish APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **11**
- SRM **6.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (73.4%) | 80 % | 5 |
| Grain | Płatki owsiane | 0.6 kg (11%) | 85 % | 3 |
| Grain | Płatki pszeniczne | 0.6 kg (11%) | 85 % | 3 |
| Grain | Strzegom Karmel 150 | 0.25 kg (4.6%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | izabella | 20 g | 60 min | 5.5 % |
| Aroma (end of boil) | izabella | 30 g | 0 min | 5.5 % |
| Dry Hop | zula | 50 g | 3 day(s) | 7.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|---------|------------------|
| FM55 Zielone Wzgórze | Ale | Liquid | 1200 ml | Fermentum Mobile |